THE COMPLETE

ART of WAR

孫家兵法

SUN TZU ✦ SUN PIN

translated by

RALPH D. SAWYER

The Complete Art of War

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SUN TZU
SUN PIN

Translated, with Historical Introduction and Commentary, by
Ralph D. Sawyer

With the collaboration of
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History and Warfare

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In memory of Achilles Fang

Preface

One who knows the Tao of the Sun family will invariably unite with Heaven and Earth.

The concepts and principles embodied in Sun-tzu's long-famous *Art of War* not only determined the thrust of Chinese military science for two and a half millennia but also remain important even today, being found in many spheres and diverse applications. Moreover, the implications of this laconic text—and now Sun Pin's *Military Methods* as well—are constrained solely by the reader's perspective and imagination. Among the many interpretations presently seen in the Far East and, to a more limited extent, Western countries as well, perhaps the most fruitful derive their utility from mapping military thought onto analogous domains. Naturally the concepts and tactics provide important material for military science in general, and many have been incorporated into contemporary doctrine by armies worldwide, including the U.S. Marine Corps. The business world and especially marketing, long considered battlefields and characterized in terms of military idioms and tactics, provide the most conducive, frequently explored environments. However, in Asian countries it has become popular to adopt abstracted tactics and conceptual principles from the Sun family military writings to personal life, ranging from the simplest social activities through career advancement and interactions with society at large. Some books even apply fundamental perceptions to the stock market, sexual relationships, and self-defense, largely through stimulating an awareness in the reader that other perspectives and unorthodox tactical principles might be applied in so-called ordinary situations.

The intent of *The Complete Art of War* is to provide readers with an integrated edition of the remarkable Sun family military writings—Sun-tzu's famous analytic overview of the nature of warfare known as the *Art of War* and the work recently recovered from a Han dynasty tomb attributed to his direct descendant Sun Pin, also entitled the *Art of War* but, for convenience, best identified as *Military Methods.* This integrated edition differs from our previous single-volume editions (and the *Art of War* translation included in our *Seven Military Classics* translation) in unifying and expanding the chapter commentaries; appending a tactical index; revising the translations slightly to make them more accessible upon first reading; excising material of interest primarily to scholars; abridging the historical background; and deleting the tactical analysis of the various battles.

While the Sun family military writings remain eminently comprehensible apart from their respective eras, a basic understanding of the chief political events, crucial battles, and nature of warfare in the two periods aids immeasurably in understanding many of the more enigmatic statements found in both writers. Therefore, for this integrated edition an abridged introduction focusing upon the historical context, including full translations of the authors' traditional biographies, has been prepared. Furthermore, previous readers have found the conceptual commentaries, appended to individual chapters to explicate tactics and doctrines as they arise, more useful than a lengthy, synthesized analysis presented in a general introduction. Thus, we have opted to continue this ancient Chinese tradition. Moreover, an extensive conceptual and strategic index has been added to facilitate the study of vital topics and critical tactics in both the *Art of War* and *Military Methods.* With the aid of the introductory material, coupled with the chapter commentaries and index, readers should have no difficulty in selectively adapting material from the *Art of War* and the *Military Methods* to appropriate life or

business situations. To facilitate this process—yet avoid comments that might overly restrict imaginative response—some suggestions are made in the chapter commentaries, particularly for business applications, as the topics arise. *Such suggestions are provided as a matter of explication; their applicability and appropriateness, if any, to the reader's situation and activities remain the responsibility of the reader.* Since these writings are the product of military activities, their primary—or at least initial—understanding should be as realized by men and forces in the difficult arena of the battlefield. Only upon this sound basis of understanding can one successfully extrapolate the principles contained within them and envision applications to the personal milieu.

Sun-tzu's *Art of War* has long been recognized as China's oldest and most profound military treatise, all other works being relegated to secondary status at best. Traditionalists attribute the book to the historical Sun Wu, who is portrayed in early historical writings as active in the last years of the sixth century, beginning about 512 B.C. In their view the book preserves his strategic concepts and tactical principles and should therefore be dated to this period. Through the ages, however, more skeptical scholars have questioned the work's authenticity, citing certain historical discrepancies and glaring anachronisms to justify their positions. While their arguments vary in credibility, only the most extreme deny Sun Wu's military role or question his very existence. A balanced view—taking into account the evolving nature of warfare, the rising need for military and bureaucratic specialization, the personalities involved, the complexity of the politics, and the fragility of recorded material— might well conclude that the historical Sun Wu existed, and not only served as a strategist and possibly a general but also composed the core of the book that bears his name. Thereafter the essential teachings were perhaps transmitted within his family or a close-knit school of disciples, being improved and revised with the passing decades, while

gradually gaining wider dissemination. The early text may even have been edited by his famous descendant Sun Pin, who also extensively employed its teachings in his own *Military Methods* and simultaneously made the Sun name even more glorious.

The recently unearthed military writings include a partial copy of the *Art of War* in essentially its traditional form, together with significant additional material, such as the "King of Wu's Questions." Our translation, however, has been based upon the heavily annotated classical edition because it reflects the understanding and views of the past thousand years, the beliefs upon which government and military officials based their actions in real history, and continues to be the most widely circulated version throughout Asia. Nevertheless, the traditional text has been revised where the tomb materials resolve otherwise opaque passages or supplement obvious deficiencies, although the impact of such changes on the overall content remains minimal.

While there are few problems with the actual text of Sun-tzu's *Art of War,* Sun Pin's *Military Methods* is tortuously difficult, having been reconstructed from hundreds of jumbled, often damaged bamboo strips. Even in this imperfect condition, the work remains a remarkable middle Warring States text, one that presumably embodies the views of the great strategist who was active in *Ch'i* at least from 356 to 341 B.C. and perhaps lived until near the end of the century. A precise translation, such as found in our single-volume edition of the *Military Methods,* necessarily indicates all the lacunae, reconstructions based upon interpolations from parallel passages, other difficulties, and wild speculations. In the expectation that nonscholars will find the *Military Methods* more readable and interesting if these problems are, however tentatively, resolved, except in a very few cases we have revised the material and occasionally deleted incomprehensible fragments. In a few passages we have also supplied rather speculative bridges

based upon the chapter's apparent intent and our focused reading of military works over the past three decades. Anyone wishing to pursue the original may of course consult our 1995 edition of *Military Methods,* available from Westview Press.

As to the date of the original *Military Methods* and the degree to which the recovered copy represents an embellished or otherwise altered version, it appears that the book is based upon the thought of Sun Pin, who, perhaps wishing to emulate his famous predecessor, may have composed a proto-text or developed a kernel of fixed teachings, but was compiled and edited by disciples or family members. The first fifteen chapters are cast in the dialogue form common to other early writings (such as the *Mencius*) and almost always indicate the speaker. The second part of the book may have originally comprised extended discussions on concrete topics (such as found in the critical chapter on the unorthodox and orthodox) that Sun Pin did not put into dialogue form or that his students simply did not format in the same way. Sun Pin obviously acquired disciples during his lifetime, for they are mentioned in the text questioning him about his discussions with King Wei and T'ien Chi. Coupled with other internal evidence, this suggests they may have finished *Military Methods* about the end of his life or compiled it shortly thereafter from memory to preserve the master's teaching.

Apart from the abstract debt we owe to the many scholars who have toiled ceaselessly on these works over the centuries, we would like to acknowledge Zhao Yong's ongoing assistance in locating and obtaining obscure textual materials. In addition, we have benefited greatly from wide-ranging discussions with Colonel Karl Eikenberry, Bruce I. Gudmundsson, C. S. Shim, Cleon Brewer, Rob Wadleigh, and Guy Baer here and in Asia. For their efforts in making this

work possible we would like to express our appreciation to the staff at Westview Press, and in particular to Peter Kracht, senior editor, and Kermit Hummel, publisher. Profound thanks are also due to Max Gartenberg for his wisdom and optimism and to Lee T’ing-jung who has once again honored the work with his calligraphy.

Ralph D. Sawyer

A Note on Pronunciation

As our views on orthography are unchanged, we repeat our comments from our previous works: Unfortunately, neither of the two commonly employed orthographies makes the pronunciation of romanized Chinese characters easy. Each system has its stumbling blocks, and we remain unconvinced that the Pinyin *qi* is inherently more comprehensible to unpracticed readers than the Wade-Giles *ch'i,* although it is certainly no less comprehensible than *j* for *r* in Wade-Giles. However, as many of the important terms may already be familiar and previous translations of Sun-tzu's *Art of War* have mainly used Wade-Giles, we have opted to employ it throughout our works, including the *Art of War* and *Military Methods* texts found in this combined edition. Well-known cities, names, and books—such as "Peking"—are retained in their common form, and books and articles published with romanized names and titles also appear in their original form.

As a crude guide to pronunciation we offer the following notes on the significant exceptions to normally expected sounds:

t, as in *Tao*: without apostrophe, pronounced like *d*
p, as in *ping*: without apostrophe, pronounced like *b*
ch, as in *chuang*: without apostrophe, pronounced like *j*
hs, as in *hsi*: pronounced *sh*
j, as in *jen*: pronounced like *r*

Thus, the name of the famous Chou dynasty is pronounced as if written "jou" and sounds just like the English name "Joe."

Chronology of Approximate Dynastic Periods

Dynastic Period	*Years*
Legendary Sage Emperors	2852-2255 B.C.
Hsia	2205-1766
Shang	1766-1045
Chou	
Western Chou	1045-770
Eastern Chou	770-256
Spring and Autumn	722-481
Warring States	403-221
Ch'in	221-207
Former Han (Western Han)	206 B.C.-8 A.D.
Later Han (Eastern Han)	23-220
Six Dynasties	222-589
Sui	589-618
T'ang	618-907
Five Dynasties	907-959
Sung	960-1126
Southern Sung	1127-1279
Yuan (Mongol)	1279-1368
Ming	1368-1644
Ch'ing (Manchu)	1644-1911

Introduction

SUN TZU AND HIS ERA

The Spring and Autumn Period

The state of Chou, which had righteously overthrown the debauched Shang to found its own dynasty in 1045 B.C. upon an avowed foundation of moral virtue and benevolence, established its authority by dispatching royal clan groups to both enemy and unsettled domains. Within a few generations, however, the Chou began experiencing nomadic pressure in the north and west; therefore, the quest for allies, resources, and political strength had to be redirected toward the south and southeast. Several early Chou kings enthusiastically undertook military campaigns to the south with mixed results, and King Chao, the fifth to reign, even perished mysteriously, leading to the oft-repeated charge that the state of Ch'u had murdered him. While members of the ruling clans originally emigrated to these areas for defensive purposes, this southern offensive essentially became cultural in nature. The peoples around initial Chou enclaves gradually became sinicized, particularly as they acquired a taste and then need for Chou products and technologies. Numerous small states proudly claimed descent from one or another Chou royal family member, and most at least nominally allied themselves with the Chou, and later with the stronger northern states that emerged when Chou power visibly declined.

The Spring and Autumn period (722–481 B.C.) was characterized by great personalities, inescapable intrigue, murder, ever-expanding warfare, and the unfolding of astounding dramas in which entire states rose and perished,

often at the whims of dominant individuals. It witnessed the rise of great families and their inevitable, often brutal conflict with the older ruling Chou nobility, as well as the destructive emergence of seven great states, each reputedly capable of fielding 10,000 chariots. By the early sixth century the state of Chin had already formed six armies, visibly usurping Chou royal prerogative, and could easily mobilize 75,000 men whenever necessary. (These same six armies, under the control of rival factions, would eventually sunder the state as the six ministerial families contended for ultimate authority.) Originally founded by the royal house of Chou, awesome Chin then abrogated the role of hegemon or de facto ruler under the legitimized guise of sustaining Chou rule and coerced the other states into formally recognizing and even sanctifying its prestigious role.

Although the central states vigorously contended among themselves for relative supremacy, they retained a joint sense of identity, consciously distinguishing themselves from the uncivilized “barbarian” areas and peoples. Consequently, with both disdain and trepidation they observed the rapid development of the wild southern areas where the states of Ch’u (an important stimulant to Sun-tzu’s thought), Wu (home to Sun-tzu’s activities), and Yüeh (Wu’s nemesis) were forming. They also feared the ever less submissive state of Ch’in in the old Chou heartland. The south was not only different but also enjoyed distinct advantages, including a warmer, more productive climate; abundant aquatic resources; and extensive rivers, lakes, mountains, and dense forests. A natural bastion that frequently rendered chariot- centered warfare useless, the terrain discouraged invasions from the north while compelling the development of naval forces. These inland navies capitalized upon the indigenous skills that had evolved to exploit the Yangtze, Han, and Huai rivers, the numerous lakes, and the expansive marshes.

The powerful state of Wu claimed an antiquity even greater than the Chou itself, supposedly having been founded by the eldest son of an early Chou ancestor. Because much of it occupied an alluvial plain formed by the Yangtze River, Wu lacked anything more than small hills, and approximately 15 percent of its area was wet, consisting of marshes, rivers, lakes, and ponds. (These natural obstacles probably stimulated Sun-tzu's development of terrain-based tactical principles.) Before Sun-tzu assumed his advisory role, the contiguous states of Wu and Ch'u had been fighting for more than fifty years. While Ch'u was initially strong, as the decades passed Wu commenced increasingly aggressive actions, forcing Ch'u to undertake massive defensive preparations, including the construction of walled cities and other fortifications, beginning around 538 B.C.Wu also benefited from Ch'u's tendency to brutally suppress minority peoples and the smaller states in the region, easily finding numerous allies and local support among them. By exploiting the sense of common identity fostered by confronting a mutual enemy, Wu was able to draw upon them for material support, local guides, and field intelligence, an important element in Sun-tzu's overall doctrine.

Being a young state, Wu was marked by a growing self-consciousness but still generally governed by dynamic leaders who largely avoided the pitfalls of extravagance and debauchery. Instead of exploiting or exhausting the people, its kings fostered policies to nurture them, increase the population, and stimulate productivity. Consequently, throughout their numerous military campaigns Wu's warriors were courageous and energetic, endured great hardship, and often turned defeat into victory. Their leadership was also more unified than in other states, perhaps accounting for the army's flexibility and ability to respond quickly. Moreover, because their forces would be outnumbered in virtually every clash with Ch'u's armies, Wu's leaders had to develop imaginative tactics and

consistently avoid frontal, brute-force assaults that could decimate their troops, an approach reflected in Sun-tzu's emphasis upon maneuver warfare and avoiding direct confrontations with superior enemies. Wu's attacks stressed speed and mobility, frequently employed deceit and clever stratagems, and focused upon frustrating the enemy's plans and movements—all cardinal principles in the *Art of War.*

Conversely, Wu also mounted such formidable defenses that Ch'u's armies frequently could not discover any weakness to exploit. Clearly, Wu's pre-Sun-tzu efforts exemplified and perhaps furnished the historical basis for several pivotal teachings from the *Art of War,* including: "Subjugating the enemy's army without fighting is the true pinnacle of excellence. The strategy for employing the army is not to rely on their not coming, but to depend upon us having the means to await them. Do not rely on them not attacking, but depend upon us having an unassailable position. When someone excels at defense the enemy does not know where to attack. If I do not want to engage in combat, even though I merely draw a line upon the ground and defend it, they will not be able to engage me in battle because we thwart his movements."

In the first year of King Ho-lü's reign, after some years of preparation, Wu moved its capital to Ku-su near modern Su-chou. The new capital, erected on the Chou model with inner and outer fortified walls, furnishes clear evidence of the effectiveness of Wu's bureaucratic administration, as well as its material resources and planning capabilities. The city was immense, with the inner wall's perimeter reportedly measuring 30 kilometers and the outer wall stretching 50 kilometers. Constructed at the edge of Lake T'ai Hu, it was sited along the first section of an eventual network of extensive canals that were to prove of great significance in Chinese history. Ostensibly developed to transport grain and nurture trade, this first canal section was primarily strategic, designed to facilitate the movement of troops northward.

Commencing with Ho-lü's third year, Wu launched a series of nearly annual attacks against Ch'u, always emerging victorious. With each attack it subjugated additional Ch'u client states, sometimes permanently absorbing them, at other times merely freeing them from the yoke of dominance. At the same time, Wu sought to ensure that any of the smaller, powerful states that might mount a surprise attack on its homeland—should it mobilize to undertake a far-reaching campaign—had its military potential negated through preemptive aggressive action. Wu also mounted its first strike in the lengthy, eventually fatal conflict with Yüeh in 510 B.C.; thereafter, astutely fearing Yüeh's great military potential, King Holü had Wu's already extensive fortifications strengthened and expanded in order to encompass all the populace. In 509 B.C. Ch'u finally decided to attempt an attack against Wu, only to be repelled and suffer the loss of additional towns.

Meanwhile, Wu had deliberately adopted a strategy of temporizing and harassment in order to enervate Ch'u and dissipate its resources. Dividing its forces into three field armies, Wu dispatched each in turn to engage the enemy without becoming involved in protracted battles or decisive confrontations. Mobility was equally emphasized in effecting a long-term campaign that not only had physical objectives but also focused on disrupting Ch'u's command, sowing doubt and dissension, and frustrating its leadership until Ch'u would become simply incapable of coping with Wu's threats.

The strategy of mounting a marauding campaign was ostensibly chosen to allow Wu's forces time to rest and rebuild, as well as to undermine and weaken the enemy. However, Ch'u's overwhelming might and the largely impenetrable nature of its state also dictated the need to avoid headlong confrontations in which Wu would inevitably be decimated. Wu was therefore forced to contemplate employing confined terrain to its tactical advantage, to spread the enemy out, to choose its objectives carefully,

and to suddenly concentrate its forces where unexpected—all principles found in Sun-tzu's *Art of War,* which itself emphasizes segmenting and combining, changing and transforming when necessary: "The army is established by deceit, moves for advantage, and changes through segmenting and reuniting. Thus its speed is like the wind, its slowness like the forest; its invasion and plundering like a fire; unmoving, it is like the mountains. It is as difficult to know as the darkness; in movement it is like thunder."

Sun-tzu's Life and Achievements

Space does not permit recounting the battles prior to Sun-tzu's appearance nor analyzing the brilliant campaign of 506 B.C. against Ch'u, although in virtually all of them Wu seized the initiative, manipulated Ch'u's armies, and employed deceit and unorthodox tactics extensively. Wu's experience turned talented generals into effective commanders and unified the soldiers behind a king who willingly shared every hardship with them. Conversely, Ch'u increasingly antagonized its allies and the subordinate states upon whom it might have drawn; debilitated its people; and oriented itself toward self-destruction.

Vestiges of Sun-tzu's dramatic life and involvement in the events of his era are preserved in two similar biographies, one embodied in the *Shih Chi,* famous throughout Asia as China's first true history and a great literary masterpiece, the other in the *Wu Yüeh Ch'un-ch'iu.* The latter recounts a more interesting version of Sun-tzu's career and experiences:

In the third year of King Ho-lü's reign, Wu's generals wanted to attack Ch'u, but no action was taken. Wu Tzu-hsü and Po P'i spoke with each other: "We nurture officers and make plans on behalf of the king. These strategies will be advantageous to the state, and for this reason the king

should attack Ch’u. But he has put off issuing the orders and does not have any intention of mobilizing the army. What should we do?”

After a while the King of Wu queried Wu Tzu-hsü and Po P’i: “I want to send forth the army. What do you think?” Wu Tzu-hsü and Po P’i replied: “We would like to receive the order.” The King of Wu secretly thought that the two of them harbored great enmity for Ch’u and was deeply afraid that they would take the army out only to be exterminated. He mounted his tower, faced into the southern wind, and groaned. After a while he sighed. None of his ministers understood the king’s thoughts. Wu Tzu-hsü secretly realized the king would not decide, so he recommended Sun-tzu to him.

Sun-tzu, whose name was Wu, was a native of Wu. He excelled at military strategy but dwelled in secrecy far away from civilization, so ordinary people did not know of his ability. Wu Tzu-hsü, himself enlightened, wise, and skilled in discrimination, knew Sun-tzu could penetrate and destroy the enemy. One morning when he was discussing military affairs he recommended Suntzu seven times. The King of Wu said: “Since you have found an excuse to advance this officer, I want to have him brought in.” He questioned Sun-tzu about military strategy, and each time that he laid out a section of his book the king couldn’t praise him enough.

Greatly pleased, he inquired: “If possible, I would like a minor test of your military strategy.” Sun-tzu said: “It is possible. We can conduct a minor test with women from the inner palace.” The king said, “I agree.”

Sun-tzu said: “I would like to have two of Your Majesty’s beloved concubines act as company commanders, each to direct a company.” He ordered all 300 women to wear helmets and armor, to carry swords and shields, and stand. He instructed them in military methods, that in accord with the drum they should advance, withdraw, go left or right, or turn around. He had them know the prohibitions and then ordered, “At the first beating of the drum you should all

assemble, at the second drumming you should advance with your weapons, and at the third deploy into military formation.” At this the palace women all covered their mouths and laughed.

Sun-tzu then personally took up the sticks and beat the drum, giving the orders three times, and explaining them five times. They laughed as before. Sun-tzu saw that the women laughed continuously and wouldn’t stop. Sun-tzu was enraged, his eyes suddenly opened wide, his sound was like a terrifying tiger, his hair stood on end under his cap, and his neck broke the tassels at the side. He said to the Master of Laws, “Get the executioner’s axes.”

Sun-tzu then said: “If the instructions are not clear, if the explanations and orders are not trusted, it is the general’s offense. When they have already been instructed three times, and the orders explained five times, if the troops still do not perform, it is the fault of the officers. According to the rescripts for military discipline, what is the procedure?” The Master of Laws said: “Decapitation!” Sun-tzu then ordered the beheading of the two company commanders, the king’s favorite concubines.

The King of Wu ascended his platform to observe just when they were about to behead his beloved concubines. He had an official hasten down to them with orders to say: “I already know the general is able to command forces. Without these two concubines my food will not be sweet. It would be appropriate not to behead them.”

Sun-tzu said: “I have already received my commission as commanding general. According to the rules for generals, when I, as a general, am in command of the army, even though you issue orders to me, I do not have to accept them.” He then had them beheaded.

He again beat the drum, and the women went left and right, advanced and withdrew, and turned around in accord with the prescribed standards without daring to blink an eye. The two companies were silent, not daring to look around. Thereupon Sun-tzu reported to the King of Wu: “The

army is already well ordered. I would like Your Majesty to observe them. However you might want to employ them, even sending them forth into fire and water, will not present any difficulty. They can be used to settle All under Heaven."

The King of Wu was suddenly displeased. He said: "I know that you excel at employing the army. Even though I can thereby become a hegemon, there is no place to exercise them. General, please dismiss the army and return to your dwelling. I am unwilling to act further."

Sun-tzu said: "Your Majesty only likes the words; he isn't able to realize their substance." Wu Tzu-hsü remonstrated: "I have heard that the army is an inauspicious affair and cannot be wantonly tested. Thus if one forms an army but does not go forth to launch a punitive attack, then the military Tao will be unclear. Now if Your Majesty sincerely seeks talented officers and wants to mobilize the army to execute the brutal state of Ch'u, become hegemon of All under Heaven, and overawe the feudal lords, if you do not employ Sun-tzu as your general, who can ford the Huai, cross the Ssu, and traverse a thousand kilometers to engage in battle?"

Thereupon the King of Wu was elated. He had the drum beaten to convene the army's staff, assembled the troops, and attacked Ch'u. Sun-tzu took Shu, killing the two renegade Wu generals, Princes Kai-yu and Chu-yung.

The *Shih Chi* succinctly summarizes Sun-tzu's achievements: "To the West the king defeated the powerful state of Ch'u and advanced into Ying. To the north the king overawed Ch'i and Chin and manifested his name among the feudal lords. This was due to Sun-tzu imparting power to him."

If Sun-tzu's biography is at all credible, it would seem reasonable, as claimed by traditionalist scholars, that he was entrusted with overall command of Wu's military forces for the purpose of effecting their reorganization and training. From the *Art of War* and other military classics it is

clear that even at this early date, approximately 509 B.C., small-unit organization, segmentation, articulation, and maneuver were all primary objectives of military preparation, furnishing the basis for implementing complex battlefield tactics, while massive infantry forces were beginning to appear, supplemented by chariots for open-terrain engagements whenever feasible. In contrast, the armies found in the north were centered upon the chariot, with infantry forces sup- plementing them, although the latter became the central tactical element as time progressed and tactics evolved during the Spring and Autumn period. In the campaign against Ch'u that eventually reached its capital of Ying, Wu's three armies totaled 33,600 highly disciplined, well-organized combat soldiers capable of following orders and executing tactics.

Sun-tzu himself remains an enigma, not only because of the absence of historical data in the so-called authentic texts of the period but also because his life never generated the anecdotes and illustrative stories frequently found about famous figures in the works of succeeding periods. His background and early history are completely unknown, and despite recently uncovered materials it remains unclear whether he was born in the state of Wu or Ch'i and whether he had studied military strategy or served in any sort of command capacity before venturing to instruct the king of Wu. The dramatic way in which he illustrated his theories about military organization and discipline with 300 of the king's concubines, and thereby received his appointment, may well be apocryphal. Although he is never mentioned in any recorded source as having sole command of the troops, following Wu's conquest of Ying, the capital of Ch'u, his name completely disappears. Perhaps he realized the difficulty of surviving under the unstable political conditions of his time, or feared he would be executed by the new king, Fu-ch'ai, after becoming entangled in the ever-present political machinations, and set an example for later ages by retiring to obscurity, leaving his work behind. Many theories

have been vociferously advanced to explain this invisibility; however, chief among them is that most of the credit that was rightly his was attributed to his mentor, Wu Tzu-hsü, because the latter was more prominent and his life, a living melodrama writ large, provided a natural focal point for tales of intrigue and portraits of achievement. Remarkably, some scholars deny Sun-tzu's very existence, advancing the theory that he and Wu Tzu-hsü were identical, one and the same individual.

SUN PIN AND HIS ERA

The Warring States Period

Military tactics, being founded upon historical antecedents, formulated in terms of contemporary concepts, focused upon perceived capabilities, and directed toward achieving politi- cal objectives, are inescapably the product of specific environments. Battlefield evolution stimulates further developments, as may be clearly seen in the influence that the Warring States period had on Sun Pin's *Military Methods* in comparison with Sun-tzu's *Art of War.*

The Warring States period (403–221 B.C.) is aptly named because it witnessed almost interminable strife among the surviving feudal states as they strived to strengthen themselves through internal reforms and the forcible annexation of their neighbors. Unlike the Spring and Autumn period, in which a semblance of civility and vestiges of restraint had persisted under the nominal aegis of the impotent Chou king, by the Warring States period power alone had come to dictate policy and relations. While four mighty entities (Chin, Ch'u, Ch'i, and Yüeh) had dominated the realm late in the Spring and Autumn period, by the early

Warring States period Chin's powerful clans had rent it asunder, producing the three smaller though still formidable states of Han, Wei, and Chao—also termed the "Three Chin"—plus a minor remnant briefly maintained by the old Chin royal house. Yüeh, on the eastern coast, began the period as a respected power because it had extinguished Wu, but doomed by internal discord, it was gradually subjugated by Ch'u, which completed its conquest in 306 B.C. To the north, Yen emerged as a capable but relatively weak state, while Ch'in, which eventually vanquished all the major powers and exterminated the remaining minor ones to formally proclaim the Ch'in dynasty in 221 B.C., aggressively nurtured its power base in Chou's original territory from early in the fourth century.

Four of the era's so-called "seven powerful states"—Han, Wei, Chao, and Ch'i—were crucial participants in the events around Sun Pin, while Ch'in, ever-strengthening in the west, perpetually cast an ominous shadow over the unfolding events. Despite (or because of) the incessant warfare, it was an era of remarkable intellectual ferment as the often beleaguered rulers vigorously struggled to unify their states, impose centralized control, and establish the material prosperity necessary to sustain prolonged military campaigns. Widely diverse viewpoints and policies were espoused, although they all essentially focused upon employing capable individuals, creating effective administration, improving agriculture, and expanding the military through better organization, training, and selection. Unlike in the Spring and Autumn period, when feudal rulers were still sufficiently entrenched to feel unthreatened, in the Warring States period creative thinkers (such as Confucius) could no longer be ignored or merely tolerated. In the instability of the Warring States period a single individual, such as Shang Yang, sometimes played the key role in revitalizing an otherwise moribund state, often against virtually overwhelming opposition from privileged interests. In other instances a succession of "Worthies" or a propitious

conjunction of talents persuaded a ruler to forge ahead by implementing revolutionary measures.

Military organization strengthened considerably in the Warring States period as both campaign and standing armies expanded. It was not just augmented numbers, however, but rather a dramatic increase in the basic qualifications and expertise of the soldiers that had the greatest impact. Infantry development peaked and the cavalry was introduced, although the latter was not a factor —if it even existed—in the two famous battles linked with Sun Pin's name, Kuei-ling and Ma-ling. A second major difference from the Spring and Autumn period was the imposition of year-round service and fixed periods of duty, rather than just assembling semi-skilled forces to supplement the warrior nobility during appropriate seasonal mobilizations and training. The early military writings frequently contain injunctions against violating the seasons, and many historic campaigns were in fact initiated in the fall, the season of death, but when prolonged engagements began to require from six months to a year, seasonal concerns obviously became moot. Rigorous training and discipline invariably became the norm in the Warring States period, with the soldiers being taught not only weapons skills but also numerous formations such as described in the *Military Methods.* With their troops acquiring articulation, segmentation, and maneuver capabilities, generals could configure their deployments to the terrain and the enemy's disposition. As the Warring States period progressed and campaign armies routinely exceeded 100,000 troops, most states imposed a form of the mutual responsibility system in which rewards and punishments were severe, and defeat, the loss of a comrade, or cowardice normally punished by death. Naturally, the soldiers' responsiveness to orders still depended upon the difficulty of the task confronting them coupled with the strictness of their commander. It is unlikely, however, that discipline was lax in any army during the period, because defeat meant death at the hands of the

enemy. Capturing prisoners was no longer a priority; destroying enemy forces had become paramount.

In the Warring States period the infantry became the primary force, displacing the chariot and outmoding old-style engagements between chariotmounted nobles. However, chariot-centered units remained significant and on reasonably level terrain they could provide a formidable penetrating force, especially when deployed against unprotected infantry arrays. Designated combat platoons would provide close support for advancing chariots, protecting them from flank attacks by enemy infantrymen, but could also be detached to act as an inde- pendent ground force and supplement the regular infantry regiments. Within the limits of terrain-imposed constraints, the commander could select and employ an appropriate mix of chariot, infantry, and (eventually) cavalry forces. Mobility is historically identified with the cavalry, but a thousand chariots could rapidly deploy at least as many bowmen, as well as a thousand warriors armed with shock weapons, assuming the driver remained with the team.

In both of Sun Pin's battles with Wei, P'ang Chüan's disorganized forces rushed onto the battlefield, presumably led by their chariots and accompanied by fleet infantry running on foot, to confront an established, well-entrenched enemy with prepared defenses. From *Military Methods* it appears that Sun Pin did not employ either the chariots or cavalry as a mobile force in the actual conflict, deploying them instead as fixed elements. Especially on the more open terrain of Kuei-ling, he may well have used the chariots as war wagons (perhaps like John Zizka) or constructed temporary fortifications from them.

Sun Pin's Life and Conflicts

Virtually every traditional source identifies Sun Pin as Sun-tzu's lineal descendant, although the actual relationship may well have been somewhat less direct. Several family trees have been suggested, but they are all dubious reconstructions that naturally ignore the possibility that Sun-tzu himself may not have existed. The common view identifies Sun Pin as Sun-tzu's grandson, but since more than a century separates their active years, "great grandson" or even "great great grandson" is more likely. Assuming that Sun Pin would have been at least twenty-five during the unfolding of the Kuei-ling campaign in 354 to 353 B.C. yields a projected birthdate of approximately 380 B.C., consistent with a statement in the *Shih Chi* placing him more than a century after Sun-tzu.

Even though he enjoys a joint biography with Sun-tzu in the *Shih Chi,* virtually nothing is known about Sun Pin's life and background apart from the incidents preserved in this account. Several scholarly and popular editions published in the past decade have recently supplied surprisingly embellished biographies for Sun Pin, but essentially they all derive from inferences based upon the *Shih Chi* and a few brief references in other writings associated with the period. Sun Pin's life and accomplishments, as reprised by Ssu-ma Ch'ien some two centuries after his death, unfold as follows:

About a hundred years after Sun-tzu died there was Sun Pin. Sun Pin was born between Ah and Chüan in Ch'i and was a direct descendant of Sun-tzu. Sun Pin had once studied military strategy together with P'ang Chüan. P'ang Chüan was already serving in the state of Wei, having obtained an appointment as one of King Hui's generals. Realizing that his abilities did not come up to Sun Pin, he secretly had an emissary summon Sun Pin. When Pin arrived, P'ang Chüan feared that he was a greater Worthy than himself, and envied him. By manipulating the laws, he managed to have him sentenced to the punishment of having his feet amputated and his face branded, wanting to

thereby keep him hidden so that he would not be seen by the king.

An emissary from the state of Ch'i arrived at Liang in Wei. Sun Pin, who was banished from the court because of his punishment, secretly had an audience with him and exercised his persuasion. Ch'i's emissary found him to be remarkable and clandestinely brought him back to Ch'i in his carriage. T'ien Chi, Ch'i's commanding general, regarded him well and treated him as an honored guest.

T'ien Chi frequently gambled heavily on linked horse races with the princes. Sun Pin observed that the fleetness of his horses did not differ much from theirs. The horses had three grades— upper, middle, and lower. Thereupon Sun Pin said to T'ien Chi: "My lord should bet again for I am able to make you win." T'ien Chi trusted him and wagered a thousand gold coins with the king and princes. When they approached the time for the contest Sun Pin then said: "Put your lowest team of horses against their best; your best team against their middle one; and your middle team against their lowest one." When the three teams raced, T'ien Chi lost one race but won two, so that in the end he gained the king's thousand gold coins. T'ien Chi then introduced Sun Pin to King Wei. King Wei questioned him about military affairs and appointed him as a strategist.

Thereafter the state of Wei attacked Chao. Chao was sorely pressed and requested aid from Ch'i. King Wei of Ch'i wanted to appoint Sun Pin as commanding general, but Pin respectfully declined, saying: "It is not possible for a man who has been mutilated by punishment." Thereupon the king appointed T'ien Chi as commanding general and Sun Pin as strategist. Pin traveled in a screened carriage, making plans while seated.

T'ien Chi wanted to lead the army into Chao, but Sun Pin said: "Now one who would untie confused and tangled cords does not strike at them with clenched fists. One who would disengage two combatants does not strike them with a halberd. While they stand opposed to each other you should

hit their vacuities. Then as their dispositions counter each other and their strategic power is blocked, the difficulty will be resolved by itself. Now Wei and Chao are attacking each other, so Wei's light troops and elite soldiers must certainly all be deployed outside their state, with only the old and weak remaining within it. Wouldn't it be better to lead the troops on a forced march to Ta-liang, occupying their roads and striking their newly vacuous points? They will certainly release Chao in order to rescue themselves. Thus with one move we will extricate Chao from its encirclement and reap the benefits of Wei's exhaustion." T'ien Chi followed his plan, and Wei did indeed abandon Han-tan, engaging Ch'i in battle at Kuei-ling. Ch'i extensively destroyed Wei's army.

Thirteen years later Wei and Chao attacked the state of Han. Han reported the extremity of its situation to Ch'i. Ch'i ordered T'ien Chi to take command and go forth, proceeding straight to Ta-liang. When General P'ang Chüan of Wei heard about T'ien Chi's thrust to Ta-liang, he abandoned his attack on Han and embarked on his return. Ch'i's army had already passed by and was proceeding to the west. Sun Pin said to T'ien Chi: "The soldiers of the Three Chin (Han, Wei, and Chao) are coarse, fearless and courageous, and regard Ch'i lightly. Ch'i has been termed cowardly. One who excels in warfare relies upon his strategic power and realizes advantages from leading the enemy where he wants. As the *Art of War* notes, 'One who races 100 kilometers in pursuit of profit will suffer the destruction of his foremost general; one who races 50 kilometers in pursuit of profit will arrive with only half his army.' Have our army of Ch'i, upon entering Wei's borders, light 100,000 cooking fires. Tomorrow make 50,000, and again the day after tomorrow start 30,000 cooking fires."

P'ang Chüan, after advancing three days, greatly elated, said: "Now I truly know that Ch'i's army is terrified. They have been within our borders only three days, but more than half the officers and soldiers have deserted." Thereupon he abandoned his infantry and covered double

the normal day's distance with only light, elite units in pursuit of them. Sun Pin, estimating his speed, determined that he would arrive at Ma-ling at dusk.

The road through Ma-ling was narrow, and to the sides there were numerous gullies and ravines where troops could be set in ambush. There he chopped away the bark on a large tree until it showed white and wrote on it, "P'ang Chüan will die beneath this tree."

Then he ordered 10,000 skilled crossbowmen to wait in ambush on both sides, instructing them: "At dusk, when you see a fire, arise and shoot together." In the evening P'ang Chüan indeed arrived beneath the debarked tree. He saw the white trunk with the writing, struck a flint, and lit a torch. He had not finished reading the message when 10,000 crossbowmen fired en masse. Wei's army fell into chaos and mutual disorder. P'ang Chüan knew his wisdom was exhausted and his army defeated, so he cut his own throat, saying: "I have established this clod's fame!" Ch'i then took advantage of the victory to completely destroy their army and returned home with Imperial Prince Shen of Wei as prisoner. Because of this Sun Pin's name became known throughout the realm, and generations have transmitted his *Military Methods.*

This dramatic biography no doubt found strong echoes in Ssu-ma Ch'ien, for both had endured the humiliation of corporeal punishment yet survived to achieve fame and greatness.

Neither T'ien Chi nor Sun Pin are mentioned as having any active role in Ch'i's military or government after the battle of Ma-ling, although their earlier reputations had spread even among enemy states. Because *Military Methods* contains references to battles subsequent to Ma-ling but not after the turn of the century, there is a slight possibility (assuming such references are not simply additions by disciples) that Sun Pin may have survived until roughly 305 or 300 B.C., when he would have been nearly eighty. However, evidence is similarly lacking as to whether

he played an ongoing role as a tactical adviser or simply remained in the obscurity of retirement.

CONCEPTS AND PRINCIPLES IN THE SUN FAMILY MILITARY WRITINGS

Sun-tzu's *Art of War,* as transmitted through the ages, consists of thirteen chapters of varying length, each ostensibly focused upon a specific topic. While most contemporary Chinese military scholars continue to characterize the entire work as an organic whole marked by the logical progression and development of themes from start to finish, obvious relationships between supposedly connected passages are frequently difficult to determine or simply nonexistent. However, the major concepts generally receive frequent, consistent treatment throughout, supporting the attribution of the book to a single figure or well-integrated school of thought.

Because the *Art of War* is remarkably lucid, if compressed and sometimes enigmatic, only a minimal introduction, supplemented by an extensive index to the major concepts, principles, and tactics, need be undertaken here. In contrast, insofar as Sun Pin's *Military Methods* is badly fragmented and the recovered passages tend to focus on concrete issues rather than general principles, a brief overview of the main concepts and fundamental tactics, in conjunction with somewhat more extensive chapter commentaries, may prove beneficial. Although disagreement continues about whether the two halves of the *Military Methods* should be considered a single work, the analysis that follows treats all thirty-one original chapters as an integral work, the product of Sun Pin's school of thought, if not Sun Pin himself. Moreover, because he founded most of his concepts and many of his tactics upon Sun-tzu's *Art of War,* the individual commentaries provide further explications of their respective viewpoints.

Fundamentals

Warfare as the Greatest Affair of State

As already mentioned, by Sun-tzu's era the practice and scope of warfare had evolved sufficiently to endanger the existence of virtually every state, large and small alike. Many had already perished; innumerable ruling families had been extinguished and their peoples subjugated; and others tenuously survived only through adroit political maneuvering and servile submission. Accordingly, amid the turmoil of the late Spring and Autumn period Sun-tzu felt that mobilizing the nation for war, committing the army to battle, and risking the state's destruction could only be undertaken with the greatest gravity. The very opening words of the *Art of War* stress the critical importance of warfare: "Warfare is the greatest affair of state, the basis of life and death, the Way to survival or extinction. It must be thoroughly pondered and analyzed."

Unlike historical incidents in which kings committed troops to battle over a few mulberry trees, or policies advanced by the Legalists in which military measures were viewed simply as another instrument for increasing the wealth and prosperity of the state, Sun-tzu stressed that warfare should not be undertaken unless the state is threatened. Moreover, haste, fear of being labeled a coward, and personal emotions such as anger and hatred should never be permitted to adversely influence state and command decision making. The army must not be rashly thrown into an engagement, thrust into a war, or unnecessarily mobilized. Instead, restraint should be exercised while—if threatened but incapable of mounting a

victorious response—effecting measures to ensure that the army cannot be defeated.

Sun Pin similarly believed warfare to be of paramount importance, critical to a state's survival in the predatory environment of the Warring States period. Moreover, perhaps in reaction to expansionist activities and new political views that advocated mounting aggressive campaigns in a quest for profits, *Military Methods* equally stresses that wars should not be undertaken except when unavoidable, never pursued for pleasure or profit. After pondering the course of human history and the comparative nature of man and animals, however, Sun Pin concluded that conflict had arisen in the mists of antiquity, was inherent to the human condition, and remained unavoidable. Despite the greatest efforts, armed clashes continued to escalate because Virtue, while fundamental and essential (as propounded by the Confucians), proved inadequate for mastering evil even during the period of the legendary Sage Emperors, China's incomparable paragons.

The corollary to this existential emphasis on warfare is avoiding debilitating conflicts that vitiate the state and perhaps create easily exploitable opportunities for third parties. Much of Sun-tzu's second chapter, "Waging War," is devoted to arguing against protracted warfare because the economic consequences rapidly become extreme. Furthermore, protracted warfare enervates the state and erodes its will to fight (as the Vietnam conflict did in America), even when the people are united with their ruler. Other writers of the Warring States era echoed Sun-tzu's theme, all mirroring his emphasis upon swiftness and decisiveness—a fundamental underpinning for all his tactics—although several, including Sun Pin, shifted his enjoinder from protracted campaigns to frequent conflicts, pointing out that numerous battles, even victories, ultimately exhaust both the army and state, inevitably culminating in disaster.

Underlying Sun-tzu's grand strategy—and that of virtually all military writers thereafter, including Sun Pin—is the assumption that the state will nurture a prosperous, contented populace whose willing allegiance to their ruler is unquestioned. This notion in fact is the sole lesson of the tomb text entitled "King of Wu's Questions," in which Sun-tzu concludes that the factions that tax their people the least, and thus stimulate economic prosperity, will prevail in the internecine strife then brewing in the powerful state of Chin. Subsequently, Sun Pin pointedly advised King Wei that his primary policy must be to enrich the state, and thereafter to strengthen the army.

Accurate Intelligence, Analysis, and Planning

Throughout the book Sun-tzu's approach is thoroughly analytical, mandating careful planning and the formulation of an overall strategy before commencing a campaign. In consonance with his emphasis on the need for rationality and self-control, Sun-tzu stressed the necessity to avoid all engagements not based upon extensive, concrete analyses of the overall situation, including the combat options and one's own capabilities. In one of his most famous statements, Sun-tzu said: "One who knows the enemy and knows himself will not be endangered in a hundred engagements."

Detailed calculations were apparently performed in the ancestral temple prior to mobilizing for a campaign, and presumably similar, more specific assessments would be made by the commander before engaging an enemy force in the field. Although undertaken in the ancestral temple, these procedures were not a form of divination but were probably based upon quantified estimates that systematically assigned numerical values to the strength of

objectively examined aspects for both sides, such as embodied in Chapter 1, “Initial Estimations.” Some forty paired, mutually defined, interrelated categories for analyzing the enemy’s strength and readiness—such as Heaven and Earth; prosperity or poverty; unity or disunity; competent rulership or weakness; social order or disorder; and other economic and military strength indicators—can be abstracted from the *Art of War.* Pre-battle evaluations turned upon numbers as respectively many or few; strength as powerful or weak; discipline as well trained or lax; and various marks of competence in command and control. Tactics for the battle itself might be conceived in terms of offensive and defensive capabilities; advancing and retreating; and the unorthodox and orthodox. The comparative state of readiness might be decided by analyzing such pairs as hungry or sated; exhausted or rested; ordered or disordered; fearful or confident; cold or warm; wet or dry; and lax or alert. Whenever, after having been properly adjusted for proportionate impact, the calculations indicated that an enemy held a decided advantage, the ruler was to shun warfare. Similarly, battlefield commanders were to avoid these enemy forces, instead assuming a defensive posture or conceiving tactics that would convert the enemy’s superiority into weakness, such as harassing the rested until they become exhausted, or forcing the united to became separated.

Sun-tzu also believed that gathering military intelligence must be a committed, ongoing activity exploiting every possible channel to gain knowledge of the enemy. Naturally, traders, although still somewhat limited in the Spring and Autumn period, might provide valuable commercial intelligence about crops, metalworking, and other industries of potential military significance, while diplomats could provide appraisals of the overall situation. Later, in the Warring States period, peripatetic persuaders would even provide detailed knowledge of defense and other aspects. Open sources could only describe the visible, however, not

the invisible—plans, military secrets, the ruler's ambition, the personality of key officials, and the character of generals. Accordingly, in "Employing Spies," history's first chapter on spycraft, Sun-tzu strongly advocated the judicious employment of spies, categorizing them according to function and indicating the essentials of interpretation and control.

In a famous passage, Sun-tzu stated: "The means by which enlightened rulers and sagacious generals moved and conquered others, that their achievements surpassed the masses, was advance knowledge." This sentence in fact summarizes Sun-tzu's approach to warfare and distinguishes him from many historical political and military leaders who ignorantly committed their states to battle. As he asserted in "Military Combat": "One who does not know the plans of the feudal lords cannot prepare alliances beforehand. Someone unfamiliar with the mountains and forests, gorges and defiles, the shape of marshes and wetlands, cannot advance the army. One who does not employ local guides cannot obtain advantages of terrain." Later military texts, including *Military Methods,* indicate the need to gather military and political intelligence, even to employ spies, as essential to precampaign preparations, but mainly as a statement of fact or a simple reminder rather than with the intensity of the *Art of War.*

Strategic Objectives and Methods

Sun-tzu, who envisioned warfare somewhat more transcendentally than later writers, believed that the primary objective should be vanquishing the enemy without actually engaging in combat, thereby realizing the ideal of complete victory: "The highest realization of warfare is to attack the enemy's plans; next is to attack their alliances; next to attack their army; and the lowest is to attack their

fortified cities. Thus one who excels at employing the military subjugates other people's armies without engaging in battle, captures other people's fortified cities without attacking them, and destroys other people's states without prolonged fighting. He must fight under Heaven with the paramount aim of preservation. Thus his weapons will not become dull, and the gains can be preserved. This is the strategy for planning offensives."

Whenever possible victory should be achieved through diplomatic coercion, disrupting the enemy's alliances, thwarting its plans, and frustrating its strategy. Only if someone threatens military action or refuses to acquiesce without being brutalized should the government resort to armed combat. Even when exercising the military option, every campaign should strive to achieve maximum results with minimum exposure, limiting as far as possible the destruction to be inflicted and suffered.

In Sun-tzu's view, defensive measures are equally aggressive for they ensure that the army's strength will be sufficient to prevail in situations where other techniques, including deception, cannot be effectively implemented: "One who cannot be victorious assumes a defensive posture; one who can be victorious attacks. In these circumstances, by assuming a defensive posture, strength will be more than adequate, whereas in offensive actions it would be inadequate. Those who excel at defense bury themselves away below the lowest depths of Earth. Those who excel at offense move from above the greatest heights of Heaven. Thus they are able to preserve themselves and attain complete victory." In consonance with these beliefs Sun-tzu observed: "The victorious army first realizes the conditions for victory, and then seeks to engage in battle. The vanquished army fights first, and then seeks victory."

Obviously his dictum was directed toward generals who, having assumed the mantle of command, rushed headlong into battle, who fought whenever confronted by an enemy

force and thereby endangered not only their own troops but also the state.

Command and Control

The Commander

Since the commander-in-chief controls the state's destiny, both Sun-tzu and Sun Pin extensively discussed his qualifications, enumerating critical abilities and characteristics and identifying assets and liabilities. These discussions, coupled with assertions in both texts regarding the necessary independence of the commander once in the field, provide clear evidence of the rise and status of professional generals, although such qualities were equally to pertain to rulers, whether simply governing the state or serving as their own field commanders.

All military and philosophical writings that propose ideal combinations of traits for commanders stress courage or wisdom. The chapter entitled "Initial Estimations" in the *Art of War* identifies the following as requisite characteristics for any general: wisdom, credibility, benevolence, courage, and strictness. Commentators have traditionally emphasized the placement of wisdom before courage, although Sun-tzu never justified its priority. However, making wisdom fundamental fully accords with the importance accorded calculations, knowledge, and tactical expertise throughout the book. Conversely, Sun-tzu never commented on the role of courage except to condemn generals obsessed with a commitment to dying.

Correlating the important traits and abilities with the weaknesses specifically mentioned in the *Art of War* yields a

comprehensive portrait of a good commander. In addition to the strengths named above, the general should be knowledgeable, skilled in analysis, and unconcerned by fame and punishment. He places the army first and is tranquil, obscure (unfathomable), upright, self-disciplined, and clever and inventive. His talents are all-encompassing. In contrast, a weak general is unenlightened. He brutalizes and fears the masses, is not strict, loves the people, is committed to life, is unable to fathom the enemy, and is obsessed with achieving fame. Moreover, he is easily angered, hasty to act, and arrogant. It naturally follows that the absence of desirable qualities or the presence of their opposites constitute serious flaws that enemy commanders will deliberately seek out and exploit. Subsequent military texts thus discuss numerous character deficiencies and exploitable traits, including virtues that have become extreme and therefore unbalanced, in both commanders and rulers and suggest concrete ways to systematically probe for them and then turn them to advantage.

Finally, commanders and rulers must cultivate Virtue, righteousness, and the other aspects of rulership and command prowess and thereby attain *Te,* the encompassing personal power necessary to overawe the realm and their subordinates. These and other issues of righteous qualification are only briefly mentioned in the *Art of War,* never focused upon or developed as in many other writings, including *Military Methods.* By Sun Pin's era, however, because the commanding general not only controlled the military power that could ultimately decide a kingdom's fate but also had to formulate strategy and execute complex tactics during lengthy campaigns such as Kuei-ling and Ma-ling, rulers were forced to exercise even greater care in evaluating candidates for the position. No doubt loyalty became paramount because once deployed in the field, in direct command of increasingly loyal troops, a disaffected or ambitious general could easily rebel or shift his allegiance to enemy authorities. Moreover, the king would be doubly

endangered to the extent that he committed his best troops to the field.

According to enumerations found in several chapters of *Military Methods,* the commanding general, as well as virtually any officer exercising authority over military units, should be qualified by personal characteristics, intelligence, knowledge, and command skills. He should be a man of Virtue in every sense: benevolent, courageous, righteous, incorruptible, and caring. Moreover, he must not only manifest positive characteristics but also be free from the innumerable character flaws that can doom campaigns or be easily exploited, such as arrogance, greed, frivolity, cowardice, indecisiveness, laziness, slowness, brutality, selfishness, argumentativeness, carelessness, doubt, irascibility, and dejection.

Intelligence, knowledge (gained from study and experience), and the wisdom to make appropriate evaluations were also minimal requirements. Furthermore, Sun Pin believed, a good general had to possess and exercise sufficient command and control skills that the army would be united, disciplined, submissive, and spirited. He had to be awesome to evoke respect and obedience, but not brutal; treat the men well, evincing concern, but without forfeiting their martial spirit; and elicit great effort without exhausting the army. He had to be confident, so that people would trust his orders, and decisive, rarely changing his commands or directions.

Finally, both Sun-tzu and Sun Pin repeatedly stated that the commanding general, once appointed, should not only enjoy the ruler’s complete confidence but also be empowered with absolute authority to conduct military affairs solely as his judgment might dictate. The ruler should never interfere, nor should high-ranking government officials be allowed to challenge the commander’s dictates. Naturally, subordinate officers would question his judgment and orders only on the pain of death.

Selecting, Training, and Controlling the Troops

The era of qualifying men for military duty based upon increasingly severe standards is frequently identified with the brilliant general Wu Ch'i, who was active in Wei around the end of the fifth century, approximately midway between Sun-tzu and Sun Pin. Because Sun-tzu is virtually silent upon the issues of qualifications (apart from commanders), organization, and training, Wu Ch'i's writings probably reflect trends that had become visible in the stronger states in the intervening century. By 350 B.C., Sun Pin apparently assumed that soldiers would be at least minimally qualified for military duty, although he also emphasized employing elite units composed of selected men for the critical tasks of spearheading assaults and penetrating formations. Moreover, while he stressed the need to gain the masses because they can provide the means to victory, Sun Pin disparaged the role of large numbers alone, believing that untrained masses cannot be relied upon for success. To be effective, he said, troops have to be controlled, motivated, and molded into a unified force in which all the individual units vigorously cooperate with and sustain each other. However, the task of wresting victory generally falls to selected, spirited forces.

Throughout the Spring and Autumn and Warring States periods, rife with daily threats to life and existence, apart from the hierarchical organization imposed on the troops together with the various forms of mutual responsibility that bound (or entangled) the members of each squad inextricably together, the main method of control was the strict implementation of systems of reward and punishment. While both Sun-tzu and Sun Pin certainly ascribed to contemporary beliefs on the necessity and efficacy of such systems, only the edges of a fully formulated doctrine are

apparent in the few statements preserved in the *Art of War* and *Military Methods.* Sun-tzu mentions the power and importance of rewards in motivating men on the battlefield and spies in foreign territory in but three or four brief passages. Punishments receive even more cursory treatment, but as part of a very well known passage emphasizing that they can be applied only after an emotional foundation has been nurtured: “If you impose punishments on the troops before they have become attached, they will not be submissive. If they are not submissive, they will be difficult to employ. If you do not employ punishments after the troops have become attached, they cannot be used.”

Sun Pin astounded King Wei by suggesting that rewards are not the most critical issue; however, he clearly assigned a major role to them in motivating men, causing them to forget death and willingly enter into battle. Moreover, he apparently subscribed to the idea that excessive material wealth in society would blunt the effect of rewards, although his economic vision is unclear since he also stressed enriching the state as fundamental doctrine. Punishments, in contrast, make it possible to instill order and compel men to obey odious commands simply because they fear their superiors’ punitive powers. Clearly the punishments he envisioned were severe, although he does not discuss their psychology extensively.

In all cases the actions required must be reasonable in order to motivate the men to perform them and thereby reap the incentives of rewards, while the implementation of both rewards and punishments must be thorough, clear, and just.

The Psychology of Ch’i, or Spirit

Sun-tzu frequently discussed the essential problem of command: forging a clearly defined organization in control of thoroughly disciplined, well-ordered troops. The critical element is spirit, technically known as *ch'i,* the pneuma or essential vital energy of life. The concept of *ch'i* has long been fundamental to many aspects of Chinese thought, ranging from metaphysics to medicine, science through religion. One popular view is that the character for the word originally represented the vapors rising from cooking rice and is thus symbolic of nourishment in every sense. *Ch'i* is the foundation and basis of courage, the vital spirit that is directed by will and intention. As Sun-tzu indicates in the *Art of War,* when soldiers are well-trained, rested, properly fed, clothed, and equipped, if their spirits are roused they will fight vigorously. However, if physical or material conditions have deadened their spirits; if there is any imbalance in the relationship between command and troops; or if for any reason they have lost their motivation, they will be defeated.

Conversely, the commanding general must manipulate the situation so as to avoid the enemy when their spirits are strong, such as early in the day, and exploit any opportunity presented by their diminishment, attacking when they no longer have any inclination to fight, such as when about to return to camp. Prolonged warfare can only lead to enervation; therefore, careful planning to guarantee the swift execution of campaign strategy is paramount. Certain situations—such as being thrust onto fatal terrain where a desperate battle must be fought—are inherently conducive to eliciting the army's greatest efforts, while others are debilitating, dangerous, even fatal, and must be scrupulously avoided. Rewards and punishments provide the basis for control, but every effort must be made to foster and maintain the proper attitude of desire and commitment. Accordingly, all detrimental stimuli, such as omens and rumors, must be prohibited.

Sun Pin's motivational psychology is equally founded upon a psychology of *ch'i* and fully consistent with Sun-tzu's analyses and findings. Although rewards were the primary method for stimulating men in the Warring States period, Sun Pin devotes an entire chapter— "Expanding *Ch'i*"—to explicating the motivational steps required to psychologically prepare an army for battle. While other texts discuss *ch'i* and a psychology of *ch'i* can be constructed from several of them, Sun Pin's remarkable multistage analysis remains unique.

Important Strategies and Methods of Warfare

Deception and the Formless

Sun-tzu's military thought has frequently been erroneously identified solely with "deceit and deception," both in China and the West, because he strongly advocated their employment to attain military objectives. For this he was often scorned by the literati, but he was closely followed by later military writers, including Sun Pin. Although many of the tactics Sun-tzu proposed throughout the *Art of War* are premised upon executing deceptive measures, only two explicit statements appear in the book. The foremost anchors much of Chapter 1: "Warfare is the Tao of deception. Thus although you are capable, display incapability to them. When committed to employing your forces, feign inactivity. When your objective is nearby, make it appear as if distant; when far away, create the illusion of being nearby." The second one, from "Military Combat," asserts: "The army is established by deceit, moves for

advantage, and changes through segmenting and reuniting."

Despite his emphasis, however, deceit is not practiced as an art or end in itself, contrary to contemporary tendencies. Rather, false measures, feints, prevarications, troop deployments, brush dragging, feigning of chaos, and other such acts are all designed to further the single objective of deceiving the enemy so that they will be confused or forced to respond in a predetermined way and thereby provide the army with an exploitable advantage. Warfare thus must be viewed as a matter of deception, of constantly creating false appearances, spreading disinformation, and employing trickery and deceit. When imaginatively created and effectively implemented, the enemy will neither know where to attack nor what formations to employ and will accordingly be condemned to making fatal errors. Sun Pin's concurrence may be seen throughout *Military Methods* where he frequently advised implementing deceptive measures to facilitate resolving tactical problems. His focus, however, remains concrete, and no broad statement of utility ever appears.

Deception, however skillfully practiced, will invariably prove ineffective unless the army can conceal its own plans. Although the later military writings more explicitly address the need for secrecy, in "Nine Terrains" Sun-tzu stressed that the commanding general should be obscure and unfathomable, never revealing his plans or intentions *even to his own troops.* Furthermore, he said: "Direct the masses of the Three Armies as though commanding one man. Press affairs on them, do not explain the purpose to them."

Deception and manipulation are actually aspects of a greater principle involving form and the formless. Whenever the army deploys onto the battlefield, its configuration, being immediately apparent, evokes a reaction in the enemy. Whether the enemy will then modify its original anticipations, vary its tactics, or view events as confirming a preconceived battle plan depends upon its evaluation of the

unfolding situation. In normal circumstances, force deployments quickly betray the commander's intentions and methods. Although warfare in this period was neither as rigid nor as predictable as in the Early Chou or ancient Western world because segmentation, small-unit articulation, and independent movement had all been thoroughly developed by Sun-tzu's time, in general an attack's thrust could still be predicted from the method of deployment and disposition of forces.

Realizing that any action at all will elicit a response while remaining invisible is impossible, Sun-tzu advanced a theory of what might be summarized as the "deceptive and formless." Though the principle is unstated in the *Art of War,* obviously the best way to be unfathomable—that is, to be formless—is to display false appearances to the enemy. By integrating these two principles, an astute commander can manipulate the foe and preserve vital secrecy. Many commentators over the centuries failed to realize that the formless is attained through creative deceit and therefore erroneously and artificially isolated the two.

In "Vacuity and Substance," Sun-tzu elucidated two basic principles for effectively waging war: attack voids and concentrate substantial force at chosen points. The means to forcing the enemy to disperse his forces is again the formless: "If I determine the enemy's disposition of forces while I have no perceptible form, I can concentrate my forces while the enemy is fragmented. If we are concentrated into a single force while he is fragmented into ten, then we can attack him with ten times his strength. Thus we are many and the enemy is few. If we can attack his few with our many, those whom we engage in battle will be severely constrained." Naturally, to thus fragment the enemy, the army must not betray its intentions and secrecy must be maintained.

Configurations of Terrain

The recognition that topography is fundamental to military tactics, the classification of terrain types, and the correlation of basic tactical principles with particular terrains are all generally attributed to Sun-tzu. Even though a cursory examination of earlier battles indicates that effective commanders had been implementing terrain-based tactics long before Sun-tzu vaulted onto the historical stage, and certain land configurations, such as sinkholes, were commonly known to be fatal to any disposition of forces, Sun-tzu was perhaps the first to systematically study these matters and develop a coherent body of operational principles. The *Art of War* then influenced many later military writings, particularly *Six Secret Teachings,* which contains several chapters advancing appropriate tactics for a wide variety of situations.

The very first chapter of the *Art of War* identifies terrain (Earth) as one the five major factors in warfare. In Sun-tzu's definition, "Earth encompasses far or near, difficult or easy, expansive or confined, fatal or tenable terrain." Therefore, he concluded that one effective criterion for evaluating the probable victor in any encounter is based on the question, "Who has gained the advantages of Earth?"

Everything depends upon terrain because "terrain gives birth to measurement," providing the means to determine force levels appropriate to situations and the ground's configuration. Accordingly, military intelligence consists not only of knowledge of the enemy but also the topography of the invasion route and likely battlegrounds. Consequently, Sun-tzu said: "Configuration of terrain is an aid to the army. Analyzing the enemy, taking control of victory, estimating ravines and defiles, the distant and near, is the Tao of the superior general. One who knows these and employs them in combat will certainly be victorious. One who does not know these or employ them in combat will certainly be

defeated.” While his assertion would seem to be common sense at its essence, many battles have been lost just in the twentieth century because commanders neglected to acquire and familiarize themselves with accurate topographical information.

“Nine Terrains” are frequently associated with Sun-tzu because that is the title of his famous chapter where these nine appear: dispersive, light, contentious, traversable, focal, heavy, entrapping, encircled, and fatal. However, careful study of the *Art of War* reveals more than twenty distinct configurations of terrain as well as several specific deadly land formations, such as “Heaven’s Well.” They are discussed in Chapters 8, 10, and 11 and further categorized in the Tactical Index. While the terms overlap to some extent, the definitions and associated tactics are never contradictory. Furthermore, the texts remain remarkably clear and explicit even at the end of the twentieth century, precluding any need for further analysis.

Apart from named configurations, Sun-tzu also mentioned such problematic obstacles as rivers, wetlands, mountains, marshes, and salt flats. For example, in “Maneuvering the Army,” he correlated four deployments with land features that fall under his definition of “entrapping terrain”: “Where there are mountains and forests, ravines and defiles, wetlands and marshes, wherever the road is difficult to negotiate, it is entrapping terrain.” Commanders had to moderate their tactics, maneuvers, and rate of movement to compensate for such difficulties, while also seeking to exploit them to their own advantage whenever possible.

Classifying and exploiting various configurations of terrain also constitute a significant topic in *Military Methods,* where Sun Pin clearly subsumed most of his predecessor’s categories. To all the familiar “deadly terrains”—Heaven’s Well, Heaven’s Jail, Heaven’s Net, Heaven’s Fissure, and Heaven’s Pit—drawn from the *Art of War,* he added a number of generally recognized entrapping terrains.

Examples of the latter that can retard an army's progress and convert the most aggressive force into a vulnerable target include gorges with streams, valleys, river areas, marshes, wetlands, and salt flats. Water hazards are particularly troublesome, and Sun Pin provided further injunctions about going contrary to the current's flow or being caught fording rivers.

More important, Sun Pin reiterated Sun-tzu's general principle that the commanding general must investigate the terrain, become thoroughly familiar with it, and actively exploit the topography, the aspects of Earth, to emplace his troops and defeat the enemy. When the advantages of terrain are realized, the troops will naturally be inclined to fight. The enemy should be targeted on deadly ground (and of course manipulated or forced into entering it), while easy terrain should only be exploited when the commander enjoys a decisive superiority in numbers or mobile elements. Correspondingly, constricted terrain—warned against by all the military writers—and especially ravines, should be fully utilized to control and vanquish the enemy. Not only do they provide the means for the few to attack the many, but also ground conducive to exploiting advantages of height and concealing troops in ambush. With appropriate fortifications erected across the mouth, including interconnected chariots deployed with shields to fill the voids, they become strongholds not easily assaulted.

Strategic Power

The concept of strategic power figures prominently in both ancient military and Legalist thought, perhaps originating with the former. Unfortunately, its complexities require a book-length study to resolve a number of fundamental questions, and the cryptic nature of many military writings

only confuses matters. The concept is pivotal, however, in Sun-tzu's and Sun Pin's thought.

A wide variety of words have been used to translate the term for "strategic power" throughout this century, including *circumstances, energy, latent energy, combined energy, shape, strength, momentum, tactical power, force, authority, influence, power, condition of power, force of circumstances, positional advantage,* and *purchase.* While in essence the concept of strategic power entails the idea of advantage resulting from superior position, this aspect of positional advantage has perhaps been overemphasized, thereby slighting the essential role the element of mass (or the army's forces) fulfills in creating impact. According to the concepts of modern physics, the momentum that can be developed, and thus the amount of force that can be applied, when a rolling stone collides with an object in its path depends upon the original height; the final speed at the moment of impact (which will have been reduced from the theoretical maximum as it passes over objects and encounters resistance); and its weight. Clearly, a stone will transfer less energy at the moment of impact than a much larger boulder, and the total destructive potential is inherently related to the mass of the object.

The paradigm example is Sun-tzu's analogy of a log or stone perched atop a hill that, although temporarily stabilized, retains great potential energy. In motion, that energy can be explosively released and need only be directed to be effective: "One who employs strategic power commands men in battle as if he were rolling logs and stones. The nature of wood and stone is to be quiet when stable but to move when on precipitous ground. If they are square they stop, if round they tend to move. Thus the strategic power of one who excels at employing men in warfare is comparable to rolling round boulders down a thousand-fathom mountain. Such is the strategic configuration of power."

Consequently, Sun-tzu sought to maneuver the army into a position where it enjoyed such great tactical advantage that the impact of its attack, the impulse of its strategic power, would be like the sudden onrush of water cascading from mountain peaks. Deploying the troops into a suitable configuration; creating a tactical imbalance in power; concentrating forces upon focused targets; exploiting advantages of terrain; and every other activity integral to engaging in combat would be directed toward this moment, this decisive objective. Thus two equally important factors are integrated by the concept of strategic power: first, the strategic advantage conveyed by superior position, and second, the power of the forces involved. (“Power” refers to the army’s overall capability in all aspects—including endurance, spirit, discipline, equipment, command, and physical condition—rather than simply strength of numbers.) Obviously, strategic advantage also has a pronounced temporal character; therefore, it should not be confined to exploiting advantages of terrain, as frequently thought.

Sun Pin fully accepted the concept of strategic power as formulated by his illustrious ancestor but little discussed it except in a thought-provoking chapter entitled “Preparation of Strategic Power,” instead devoting his passages to the means and methods for concretely applying it on the battlefield. In short, the astute commander seeks to fully exploit whatever advantages of terrain his numbers, firepower, morale, superior provisions, and other force multipliers make possible. When these elements are attained, the soldiers will realize their army enjoys an advantage in strategic power and fervently engage the enemy; when they are not, it will prove difficult to wrest victory with a force of reluctant warriors. For Sun Pin, whose era witnessed the introduction and first widespread use of the crossbow, it was the crossbow itself that could be taken as a model. The bowman acts at a distance, unseen and unknown, just like the general, but the arrow flies forth to

inflict great damage. The release of strategic power should be like this, just as Sun-tzu himself had envisioned.

The Unorthodox and Orthodox

The concept and application of the unorthodox and orthodox, much discussed by the later military classics, probably originated with Sun-tzu. Although clearly visible in the principles and tactics proposed throughout the *Art of War,* however, the concept is specifically named in just one succinct, critical passage in “Strategic Military Power.” Moreover, it is indeed ordered as the unorthodox and orthodox, rather than as prioritized in the West, orthodox and unorthodox. While the implications, if any, remain to be explored, against a background of correctness and uprightness the choice seems deliberate. In addition, in early China the military was generally regarded as unorthodox, in accord with Lao-tzu’s pronouncement in the *Tao Te Ching:* “With the orthodox govern the state; with the unorthodox employ the army.”

While the unorthodox and orthodox clearly require a book in themselves, in essence “orthodox” tactics include employing troops in normal, conventional, “by the book,” expected ways, such as massive frontal assaults, while stressing order and deliberate movement. “Unorthodox” tactics are primarily realized through employing forces, especially flexible ones, in imaginative, unconventional, and unexpected ways. Therefore, instead of direct chariot attacks, unorthodox tactics would mount circular or flanking thrusts; instead of frontal assaults, they would follow indirect routes to stage sudden, behind-the-lines forays. Their definition of course depends upon normal expectation within a particular battlefield context, as well as the enemy’s anticipations, and therefore they are mutually defining, mutually transforming, and circular in nature. The

orthodox may be used in unorthodox ways, and an orthodox attack may be unorthodox when unexpected, precisely because it is orthodox; a flanking or indirect assault would thereby be considered normal and therefore orthodox. A frontal feint by a large force, designed to distract or lure an enemy, would also be unorthodox.

The concept can become extremely complex and has often been misunderstood throughout Chinese history, or even dismissed as simplistic, when it is quite the opposite. In essence it remains a descriptive tool for tactical conceptualization, for characterizing and manipulating forces within—and by exploiting—an enemy's matrix of expectations, rather than a transformational mode to be actualized in the concrete reality of men and weapons the way a military formation is deployed. There is nothing mysterious or mystical about the unorthodox and orthodox and their mutually productive relationship, yet later commentators and strategists sometimes become seriously confused. Under such circumstances, a useful tactical conceptualization became an unnecessary obstacle to clear strategic thinking.

In *Military Methods* things that are orthodox—whether forces, tactics, or strategies—obey the basic rules that govern general situations, whereas the unorthodox deliberately (but not simply or naively) runs contrary to normal expectation and thus entails the element of surprise. It is the latter that of course accounts for the surpassing effectiveness of unorthodox tactics. However, the ability to envision them within particular contexts requires genius, as may be seen from Sun Pin's intriguing chapter entitled "Unorthodox and Orthodox." While opposites, such as rest and motion, may be characterized by this pair, the successful creation of overwhelming tactics is far more complex, taking the practitioner into the realm of employing the formless against the formed, exploiting strength through weakness, and subverting superiority through complementary deficiencies. Although Sun Pin only focused

upon this doctrine in a single chapter, the principles may be seen in his choice of advanced tactics for defeating various formations in several earlier chapters as well, such as segmenting the troops, mounting flank and encircling attacks, and generally manipulating the enemy to render him vulnerable to unexpected measures.

Tactical Principles

Essential Measures

Sun-tzu’s numerous principles might well be reduced to the fundamental one of manipulating the enemy, thereby creating the opportunity for an easy victory, and then applying maximum power at the appropriate moment. To this end he classified the types of terrain and their exploitation; advanced numerous tactics for probing, controlling, and weakening the enemy; advocated the employment of both orthodox and unorthodox troops to wrest the victory; and stressed speed and surprise. The enemy should be lured into untenable positions with prospects of gain; enervated by being wearied and exhausted before the attack; and penetrated by forces suddenly concentrated at vulnerable points. The army should always be active, even when assuming a defensive posture, to create and seize the temporary tactical imbalance of power that will ensure victory. Accordingly, certain situations and configurations of terrain should be avoided or turned to advantage when opportune. Thereafter, the focus can be directed toward realizing a predetermined campaign strategy and implementing appropriate operational and battlefield tactics to defeat the

enemy. Avoiding strong forces is not cowardice, but wisdom, for it is self-defeating to fight when and where not advantageous. As Sun-tzu stated, “One who knows when he can fight, and when he cannot fight, will be victorious.”

The foremost tactical principle for assaults is encapsulated by the famous dictum, “Go forth where they do not expect it, attack where they are not prepared.” This principle can only be realized through maintaining secrecy in all activities; by establishing complete selfcontrol and strict discipline within the army; and by being unfathomable. The corollary to being unfathomable is seeking out and gaining detailed knowledge of the enemy through all available means, including the rigorous employment of spies. The unvarying rule is never to rely upon the goodwill of others or upon fortuitous circumstances but to guarantee— through knowledge, persistent analysis, and defensive preparation—that the enemy can neither mount a surprise attack nor gain a victory through simple coercion. As Sun-tzu said: “One who knows the enemy and knows himself will not be endangered in a hundred engagements. One who does not know the enemy but knows himself will sometimes be victorious, sometimes meet with defeat. One who knows neither the enemy nor himself will invariably be defeated in every engagement.” Sun-tzu also emphasized the high price of partial knowledge: “If I know our troops can attack, but do not know the enemy cannot be attacked, it is only halfway to victory. If I know the enemy can be attacked, but do not realize our troops cannot attack, it is only halfway to victory. Knowing that the enemy can be attacked, and knowing that our army can effect the attack, but not knowing the terrain is not suitable for combat, is only halfway to victory. Thus one who truly knows the army will never be deluded when he moves, never be impoverished when initiating an action. Thus it is said if you know them and know yourself, your victory will not be imperiled. If you know Heaven and you know Earth, your victory can be complete.”

Sun Pin clearly absorbed many of Sun-tzu's fundamental concepts and implicitly assumed certain operational principles common to practices of his era. Among those actually incorporated into his thought from the *Art of War,* the most important is the fundamental principle of manipulating the enemy to create weakness, then aggressively exploiting that weakness. As many modern commentators have pointed out, Sun Pin's work is little concerned with defensive warfare, although the function and establishment of fortifications are mentioned. Prior to embarking on a military campaign, commanders must make preparations, evaluate the enemy, and formulate a comprehensive plan. Thereafter, the army's efforts should be directed toward exploiting weaknesses already present and creating opportunities where none exist. The methods, all familiar ones found in the *Art of War,* include being deceptive; luring enemies onto fatal terrain; enticing them into movement in order to destabilize and then attack them; and realizing advantages of terrain.

Whenever confronting a strong enemy, one's own forces should be divided into three or more operational groups. One group should then be employed to engage the enemy, the others kept in reserve or deployed in ambush to take advantage of the enemy's movements and contain any unexpected developments. (Sun Pin is thus the first strategist to advance the concept of a strategic reserve.) Similarly, the enemy should be coerced into splitting into dis- jointed groups, for then its soldiers can be easily engaged piecemeal by locally superior numbers. Naturally the commander must seek out and exploit every possible weakness, deliberately exacerbating those inherently marking the enemy. Among those Sun Pin identified are such character flaws in the commanding general as easily becoming angered and—as in P'ang Chüan's case, according to his biography—arrogance. Armies that are tired and weary make easy targets, just as do those on constricted terrain where their movements and potential

responses are severely limited. The confused, doubtful, unprepared, and weak can all be summarily attacked and defeated. Whether the enemy appears strong or weak, tactics should always focus upon acting unpredictably, going forth where unexpected, attacking where the enemy is unprepared, striking their weak points, vacuities, and undefended areas, assaulting their flanks, and especially encircling their rear. Emotional factors should also be considered: Fear, doubt, and confusion should be induced in the enemy through every means possible, including feigned retreats and sudden, unfathomable movements. In every instance the army's actions must be timely and confident, appropriate to the overall situation, and directed toward ultimate success.

Sun Pin also provided categories for classifying enemy armies coupled with suggested methods for response. Furthermore, he described the behavior that should characterize an invading army moving onto enemy territory and concretely analyzed cities in terms of whether they could be successfully attacked as economic, political, and military centers. However, most of this material, for which he has justifiably become famous, appears in the second half of the work. In fact, the famous principle attributed to him in the various biographical accounts of the twin campaigns—manipulate the enemy by seizing what he loves—only appears there.

Relative Strength and Appropriate Tactics

Throughout the *Art of War* Sun-tzu advised that one should fight only when victory can be perceived and should adopt a defensive posture—or simply avoid the enemy—when it cannot. By implementing proper defensive measures, the skilled general will ensconce his troops in an unconquerable

position, one from which he will emerge victorious if attacked, but might also deter a formidable enemy from even attempting an assault. Sun-tzu never suggested any concrete measures for realizing this invincibility, however; nor did he mention aggressive measures that might be implemented when forced to fight in disadvantageous circumstances. Moreover, while he clearly advocated adopting a defensive posture, the spirit of the *Art of War* distinctly inclines toward employing a variety of measures to manipulate the enemy and gain the localized advantage that will permit launching a victorious attack. Later writers were fully cognizant of the need to adopt temporizing measures, and many generals proved successful through implementing them.

Only one passage in the *Art of War* suggests general principles for combat under varying conditions of relative strength: “If your strength is ten times theirs, surround them; if five, then attack them; if double, then divide your forces. If you are equal in strength to the enemy, you can engage them. If fewer you can circumvent them. If outmatched, you can avoid them. Thus a small enemy that acts inflexibly will become the captives of a large enemy.” Even here Sun-tzu does not really advocate avoiding the enemy unless clearly outmatched, no doubt preferring to concoct measures to divide the opposing forces and then launch concentrated attacks, much as Mao did in China’s revolutionary war.

Sun Pin also pondered the parameters for innovating tactics under various conditions of relative strength, although much of the concrete discussion appears in the second half of *Military Methods.* Three possibilities exist: the few or weak against the many or strong; equal strength; and the many or strong against the few or weak. Confronting a vastly superior foe is of course every commander’s nightmare, but the imbalance also presents the greatest possibilities for glory if victory can somehow be achieved. Appropriately, there are more concrete tactical suggestions

for this situation than all the others combined, with the main advice being to employ temporizing rather than direct assault tactics; to attack where the enemy is unprepared, a general principle in any case to conserve strength and forces; to divide and strike with “death warriors” whose commitment might wrest a telling advantage; to avoid easy terrain and exploit the possibilities of constricted ground; to segment the enemy so that it will be ignorant of each group’s actions and can therefore be struck in relatively localized strength; and to stretch the enemy out, always avoiding direct confrontations.

In situations of equal strength a commander can of course employ many of the same tactics, but the measures need not be so urgently dictated or so limited in possibility. Sun Pin particularly advised that in attacking strength with strength, one should still choose a complementary configuration or a deployment that will prove effective in the specific situation rather than engage in a direct confrontation. Naturally, dividing the enemy continues to be the single most powerful tactic, presumably a preparatory measure in most circumstances.

The third situation, one of overwhelming superiority, apparently proved problematic in ancient times because tacticians were constantly surprised when rulers inquired about it. No doubt many kings and commanders fell into the pitfall of underestimating their enemies and suffered accordingly. Sun Pin suggested that to avoid this blunder the commander should feign disorder and entice the enemy into movement, tricking him into coming forth where he could be engaged and overcome by superior numbers. Alternatively, weak troops could be employed to foster the false sense of elation that would inevitably result when the enemy achieved apparently easy gains, thereby drawing the enemy out for an expanded engagement across a more extensive front. Surprisingly, many of the manipulatory tactics used against overwhelming odds, such as feeding the enemy’s arrogance and spreading them out, may also provide a key

to victory. Finally, where enemy troops are contained or trapped, an outlet should be left so as to prevent a sudden determination to fight to the death, which may result on fatal ground without escape, Sun-tzu noted. Conversely, if trapped oneself, elite troops, acting as if deranged, can be employed to disrupt the enemy and create an opening.

Formations

While Sun-tzu identified several important principles governing deployments and the control of forces in the field, he never discussed the various formations employed in his era apart from a single reference to the circular formation. In contrast, perhaps reflecting the evolution of military science that necessarily emphasized first training the troops in various formations and then selectively employing them depending upon the battlefield situation, Sun Pin not only discussed the nature of formations but in the second half of his book also provided a brief analysis of ten different formations with their advantages and countermeasures. Of particular interest is Sun Pin's use of the sword and arrow as analogies for the nature of effective formations. Essentially, there has to be a substantial structure or basis coupled with a sharp, piercing edge (since swords were primarily thrusting rather than slashing instruments in China). In the chapter entitled "Eight Formations," Sun Pin asserted that formations must be suited to the topography and that their employment should generally adhere to the principle of dividing one's forces into three operational groups, with one to execute the formation and the others to be reserve units and unorthodox forces. Unfortunately, he never elucidated the eight formations or indicated in what ways they are individually suited to various configurations of terrain. Other chapters, however, mention several specific formations: The Awl, Wild Geese, Fierce Wind, and Cloud Array appear in the

first half along with some basic characteristics, such as the Cloud Array being designed for arrow warfare. Chapter 16, which begins the second half of the book, enumerates ten different deployments or formations. (The Chinese characters for these terms are the same and the meaning not clearly segregatable, but a distinction should be made between "formations" as theoretical organizational constructs and actual "deployments," which employ formations.) The Wild Geese and Awl formations reappear among these ten, but the others are primarily a matter of shape or array, such as circular, hooked, dense, and sparse. Additional ones scattered about the book in various chapters include an "extended horizontal array," a "basket-like" deployment, the "sharp hooking array," and the "full" and "vacuous." Preferred modes of employment are indicated for some of them—such as the "square" formation being the means to solidify control and the "circular" to facilitate turning movements—but generally the descriptions are terse and lack any real explanation of their shape or mode of action. Later military compilations provide some odd renditions for them, but extensive research will be required before even minimally accurate reconstructions become possible.

Based upon these distinctive formations it is obvious that organization, segmentation, and articulated deployment were all essential elements in any commander's tactics. From other writings, the basic outlines of organization, such as by squads of five and companies of a hundred, are clear and to be expected in the state of Ch'i as well. If the training techniques of Sun Pin's era were at all like those preserved in *Six Secret Teachings* and similar writings, the troops would have been well drilled and easily capable of responding on signal to deploy in any particular formation and subsequently change into a different one. The commander's responsibility would be to chose appropriately, providing himself with advantageous forms while denying the enemy an opportunity to attack or find an

easy opening. Some, such as the diffuse formation, were clearly designed to allow the enemy to penetrate and become trapped, particularly as Sun Pin otherwise advises that the middle should be kept open or void. Moreover, based on the arrow analogy, normally the general should place his best troops at the front, so that their combat power is greatest there even though large numbers of soldiers are kept in reserve.

Sun-tzu
Art of War

Translation and Commentary

孫子兵法

1
Initial Estimations

SUN-TZU SAID:

Sun- “Warfare is the greatest affair of state, the basis of life and death, the Tao to survival or extinction. It must be thoroughly pondered and analyzed.

“Therefore, structure it according to the following five factors, evaluate it comparatively through estimations, and seek out its true nature. The first is termed the Tao, the second Heaven, the third Earth, the fourth generals, and the fifth the laws for military organization and discipline.

“The Tao causes the people to be fully in accord with the ruler. Thus they will die with him; they will live with him and not fear danger.

“Heaven encompasses yin and yang, cold and heat, and the constraints of the seasons.

“Earth encompasses far or near, difficult or easy, expansive or confined, fatal or tenable terrain.

“The general encompasses wisdom, credibility, benevolence, courage, and

strictness.

“The laws for military organization and discipline encompass organization and regulations, the Tao of command, and the management of logistics.

“There are no generals who have not heard of these five. Those who understand them will be victorious; those who do not understand them will not be victorious.

“Thus when making a comparative evaluation through estimations, seeking out its true nature, ask:

Which ruler has the Tao?

Which general has greater ability?

Who has gained the advantages of Heaven and Earth?

Whose laws and orders are more thoroughly implemented?

Whose forces are stronger?

Whose officers and troops are better trained?

Whose rewards and punishments are clearer?

“From these I will know victory and defeat!

“If a general follows my methods for estimation and you employ him, he will certainly be victorious and should be retained. If a general does not follow my methods for estimation and you employ him, he will certainly be defeated, so dismiss him.

“After estimating the advantages in accord with what you have heard, put it into effect with strategic power supplemented by field tactics that respond to external factors. As for strategic power, it is controlling the tactical imbalance of power in accord with the gains to be realized.

“Warfare is the Tao of deception. Thus although you are capable, display incapability to them. When committed to employing your forces, feign inactivity. When your objective is nearby, make it appear as if distant; when far away, create the illusion of being nearby.

“Display profits to entice them. Create disorder in their forces and take them.

> “If they are substantial, prepare for them; if they are strong, avoid them.
>
> “If they are angry, perturb them; be deferential to foster their arrogance.
>
> “If they are rested, force them to exert themselves.
>
> “If they are united, cause them to be separated.
>
> “Attack where they are unprepared.
>
> “Go forth where they will not expect it.
>
> “These are the ways military strategists are victorious. They cannot be spoken of in advance.

“Before the engagement, one who determines in the ancestral temple that he will be victorious has found that the majority of factors are in his favor. Before the engagement one who determines in the ancestral temple that he will not be victorious has found few factors are in his favor.

“If one who finds that the majority of factors favor him will be victorious, while one who has found few factors favor him will be defeated, what about someone who finds no factors in his favor?

“If I observe it from this perspective, victory and defeat will be apparent.”

COMMENTARY

The focal thought of this chapter—the inestimable importance of warfare—has already been discussed in the Introduction. However, the more general lesson to be learned is the need to prepare thoroughly, contemplate potential courses of action carefully, and initiate only those movements that have a realistic possibility of success. This requires thoughtful self-scrutiny, but even self-analysis in itself remains insufficient because extensive, detailed knowledge of the enemy (or competitors or target markets) alone will reveal the realm of possibility. In essence, Sun-tzu advocates a path of conscious determinism rather than intuitive immersion, premising the possibility of survival and success upon the true wisdom that can only be sintered from thoroughgoing knowledge.

This chapter also introduces two of Sun-tzu's famous concepts—deception as the essence of warfare, and the fundamental principle of manipulating the enemy. For these concepts Sun-tzu garnered the condemnation of hypocritical literati who cloaked themselves in Confucian garb even though they were themselves assiduous practitioners of deceitful techniques in their daily court lives. However, throughout the *Art of War* Sun-tzu stresses the need to conserve resources, preserve lives, and wrest victory at the lowest cost. Therefore, deceiving the enemy is critical, as modern military forces tardily discovered only during the past century. Furthermore, deception underlies and furnishes the very possibility of manipulating the enemy, preying upon their weaknesses, compelling them through their desires, exploiting their expectations, and then striking when they have become exhausted and disordered.

While ethical concerns should discourage the employment of deception in many spheres, certainly in matters of self-defense and competitive sports the adroit execution of feints and misleading moves may provide the key to victory and survival. Moreover, even in business misleading one's competitors (but not customers) hardly merits condemnation, although such practices may become unmanageably complex because of their possibly negative effects on market positioning and strategy. Nevertheless, skilled ruses should be expected from one's competitors and opponents, always pondered as part of a thoroughly analytic approach.

Finally, it should be noted that Sun-tzu's dictum "Attack where they are unprepared, go forth where they will not expect it" became the watchword of Chinese military science, entering common language and becoming known by virtually everyone throughout China over the past millennia.

2
Waging War

SUN-TZU SAID:

“In general, the strategy for employing the military is this: If there are one thousand four-horse attack chariots, one thousand leatherarmored support chariots, one hundred thousand mailed troops, and provisions are transported one thousand kilometers, then the domestic and external campaign expenses, the expenditures for advisers and guests, materials such as glue and lacquer, and providing chariots and armor will be one thousand pieces of gold per day. Only then can an army of one hundred thousand be mobilized.

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“When employing them in battle, a victory that is long in coming will blunt their weapons and dampen their ardor. If you attack cities, their strength will be exhausted. If you expose the army to a prolonged campaign, the state’s resources will be inadequate.

“When our weapons have grown dull and spirits depressed, when our strength has been expended and resources consumed, then the feudal lords will take advantage of our exhaustion to arise. Even though you have wise generals, they will not be able to achieve a good result.

“Thus in military campaigns I have heard of awkward speed but have never seen any skill in lengthy campaigns. No country has ever profited from protracted warfare. Those who do not thoroughly comprehend the dangers inherent in employing the army are incapable of truly knowing the potential advantages of military actions.

“One who excels in employing the military does not conscript the people twice or transport provisions a third time. If you obtain your equipment from within the state and rely on seizing provisions from the enemy, then the army’s foodstuffs will be sufficient.

“The state is impoverished by the army when it transports provisions far off. When provisions are transported far off, the hundred surnames are impoverished.

“Those in proximity to the army will sell their goods expensively. When goods are expensive, the hundred surnames’ wealth will be exhausted. When their wealth is exhausted, they will be extremely hard-pressed to supply their village’s military impositions.

“When their strength has been expended and their wealth depleted, then the houses in the central plains will be empty. The expenses of the hundred surnames will be some seven-tenths of whatever they have. The ruler’s irrecoverable expenditures—such as ruined chariots, exhausted horses, armor, helmets, arrows and crossbows, halberd- tipped and spear-tipped large, movable protective shields, strong oxen, and large wagons—will consume six-tenths of his resources.

“Thus the wise general will concentrate on securing provisions from the enemy. One bushel of the enemy’s foodstuffs is worth twenty of ours; one picul of fodder is worth twenty of ours.

“Thus what motivates men to slay the enemy is anger; what stimulates them to seize profits from the enemy is material goods. Thus in chariot encounters, when ten or more chariots are captured, reward the first to get one. Change their flags and pennants to ours; intermix and employ them with our own chariots. Treat the captured soldiers well in order to nurture them for our use. This is referred to as ‘conquering the enemy and growing stronger.’

“Thus the army values being victorious; it does not value prolonged warfare. Therefore, a general who understands warfare is Master of Fate for the people, ruler of the state’s security or endangerment.”

COMMENTARY

Virtually the entire chapter is devoted to the single idea that protracted warfare is not only inimical to the state, but may also doom it to defeat at the hands of third parties not involved in the immediate conflict. From his estimates of the expenditures required to mobilize and sustain a campaign army—sometimes cited as indicating the text was composed in the early Warring States rather than late Spring and Autumn periods—clearly a national effort was required and regular operational forces must have grown to nearly 100,000 men. Logistical problems in antiquity, equally formidable in both China and Greece, were generally resolved by supplementing initial provisions with ongoing shipments, foraging, purchases from friendly allies, and plundering. Sun-tzu therefore emphasizes the need to capitalize upon provisions and materials seized from the

enemy, a principle no longer applicable to contemporary major forces, but certainly characteristic of guerrilla efforts and future enemies in littoral warfare.

The next to last paragraph provides a glimpse into the sophisticated psychology of warfare prominent throughout the early military writings, one that will be again encountered in subsequent chapters of the *Art of War* and the *Military Methods.* Motivating men to overcome their fear —perceived as the greatest command problem—was generally achieved through the strict employment of rewards and punishments. However, while punishments might compel soldiers onto the battlefield, they frequently failed to elicit a fervent effort, particularly when the mantra of fear gained a stranglehold. To ensure their commitment and fullest efforts, the men had to be stimulated by oaths and harangues until angered or euphoric, or promised almost unimaginable rewards for valor, including higher ranks, nobility, and remission from further military service and taxes. In this chapter Sun-tzu thus identifies two of the most prominent stimuli to martial fervor, although many others subsequently appeared. The implications for hierarchical organizations and leaders seeking to motivate men in a dispirited, materialistic world being obvious, further commentary may be omitted.

3
Planning Offensives

SUN-TZU SAID:

“In general, the method for employing the military is this: Preserving the enemy’s state capital is best, destroying their state capital second-best. Preserving their army is best, destroying their army secondbest. Preserving their battalions is best, destroying their battalions second-best. Preserving their companies is best, destroying their companies second-best. Preserving their squads is best, destroying their squads second-best. For this reason attaining one hundred victories in one hundred battles is not the pinnacle of excellence. Subjugating the enemy’s army without fighting is the true pinnacle of excellence.

“Thus the highest realization of warfare is to attack the enemy’s plans; next is to attack their alliances; next to attack their army; and the lowest is to attack their fortified cities.

“This tactic of attacking fortified cities is adopted only when unavoidable. Preparing large movable protective shields, armored assault wagons, and other equipment and devices will require three months. Building earthworks will require another three months to complete. If the general cannot overcome his impatience but instead launches an assault wherein his men swarm over the walls like ants, he will kill one-third of his officers and troops, and the city will still not be taken. This is the disaster that results from attacking fortified cities.

“Thus one who excels at employing the military subjugates other people’s armies without engaging in battle, captures other people’s fortified cities without attacking them, and destroys others people’s states without prolonged fighting. He must fight under Heaven with the paramount aim of ‘preservation.’ Thus his weapons will not become dull, and the gains can be preserved. This is the strategy for planning offensives.

“In general, the strategy for employing the military is this: If your strength is ten times theirs, surround them; if five, then attack them; if double, then divide your forces. If you are equal in strength to the enemy, you can engage him. If fewer, you can circumvent him. If outmatched, you can avoid him. Thus a small enemy that acts inflexibly will become the captives of a large enemy.

“The general is the supporting pillar of state. If his talents are allencompassing, the state will invariably be strong. If the supporting pillar is marked by fissures, the state will invariably grow weak.

“Thus there are three ways by which an army is put into difficulty by a ruler:

“He does not know that the Three Armies should not advance but instructs them to advance or does not know that the Three Armies should not withdraw and orders a retreat. This is termed ‘entangling the army.’

“He does not understand the Three Armies’ military affairs but directs them in the same way as his civil administration. Then the officers will become confused.

“He does not understand the Three Armies’ tactical balance of power but undertakes responsibility for command. Then the officers will be doubtful.

“When the Three Armies are already confused and doubtful, the danger of the feudal lords taking advantage of the situation arises. This is referred to as ‘a disordered army drawing another on to victory.’

“Thus there are five factors from which victory can be known:

“One who knows when he can fight, and when he cannot fight, will be victorious.

“One who recognizes how to employ large and small numbers will be victorious.

“One whose upper and lower ranks have the same desires will be victorious.

“One who, fully prepared, awaits the unprepared will be victorious.

“One whose general is capable and not interfered with by the ruler will be victorious.

“These five are the Tao to know victory.

“Thus it is said that one who knows the enemy and knows himself will not be endangered in a hundred engagements. One who does not know the enemy but knows himself will sometimes be victorious, sometimes meet with defeat. One who knows neither the enemy nor himself will invariably be defeated in every engagement.”

COMMENTARY

The first passages in this chapter succinctly advance a view of offensive warfare consonant with Sun-tzu's assumption that victory should be achieved with the least sacrifice of men and materials possible. Accordingly, the highest ideal is to subjugate the enemy without fighting by frustrating their plans, thwarting their preparations, and undermining their alliances because "victories" thus achieved preserve the state intact while significantly increasing its power and awesomeness. However, should actual combat become necessary, astute commanders will seek to conquer their enemies with minimal destruction to both sides, always avoiding prolonged conflict and futile battles. (While Sun-tzu's actual motives in thus seeking to subjugate the enemy intact cannot be known, they were probably a mixture of humanitarian concern, enlightened self-interest—including minimizing losses that would make the state easy prey for other enemies on the sideline—and attaining the greatest gains in captured wealth and materials. Moreover, during the Spring and Autumn period there was still at least nominal concern with undertaking campaigns solely for righteous purposes and sparing, to the extent possible, the enemy's people if only because it would minimize the pool of enmity, thereby reducing both current opposition and the danger of future retribution.)

The brief first paragraph of the second section ranks among the most famous in Chinese political and military thought, widely known throughout history in much of the Orient, frequently quoted in virtually every genre and arena even today. The tactical concept of attacking plans rather than actual forces retains contemporary applicability in numerous spheres, as does the idea of weakening foes by undermining their alliances. However, Sun-tzu's statement that "the lowest is to attack their fortified cities" has

occasioned much confusion, being frequently cited by both historians and modern military theorists as an unqualified admonition against urban warfare. In actuality, Sun-tzu simply advised against mounting expensive urban assaults *except as alast resort* because they would not only decimate the attacking forces—the defenders enjoying an overwhelming advantage in his era—but also enmire armies in the protracted idleness of siege warfare. Instead, an ensconced enemy should be lured or compelled into motion, then attacked when exposed and vulnerable, precisely Sun Pin's tactics in the two famous battles of Kuei-ling and Ma-ling. (While few of Sun-tzu's tactical principles and concepts ever became outdated, in the Warring States period the escalating scope of warfare coupled with burgeoning economic prosperity and growing populations significantly changed assault priorities, often resulting in cities being designated as preferred targets, as may be seen in "Male and Female Cities" in the Military Methods.)

The third paragraph suggests basic tactics suitable to different force ratios and may be compared with others identified in the Tactical Index. More striking is his admonition against countenancing any interference by the ruler once the army has embarked upon a campaign. His stridency in itemizing three troublesome scenarios not only provides evidence that the ruler and civilian bureaucracy had become estranged from the realities of warfare and supplanted by professional military men, but also that engagements during the period were apparently being lost because of such long-range interference. (Sun Pin also found it necessary to address this topic a century and a half later in "The General's Virtue.") In a period of difficult communication—even though China early developed a very rapid system of signal towers—the ruler would have been far more ignorant than in later centuries, including the twentieth, when civilian authorities equally entangled their nations' military enterprises, even to the extent of presuming to determine individual bombing targets.

However, submerged within this struggle lies the great issue of the civil versus the martial, the question of who will control ultimate power and the ends to which that power should be directed. Not simply a matter of political versus military authority, it impinges upon and suffuses all aspects of a civilization, determining cultural priorities, values, and goals. Although China has enjoyed cultural continuity for some three millennia, politically it has been fragmented and sundered numerous times, frequently when effete political authorities over-esteemed the civil and too vehemently disparaged the martial. Certain lessons remain to be learned from its history and the more disjointed history of the West.

The final, amazingly famous paragraph should be understood not only as a reassertion that military intelligence is necessary and must therefore be vigorously pursued (as stated in the first chapter and will again be encountered in the chapter entitled “Employing Spies”), but also a rejoinder to those who—perhaps blinded by focusing too exclusively on external dangers and the enthralling pursuit of data and secrets—would neglect self-evaluation. Whether in military engagements or on more abstract battlefields, failing to understand one’s own capabilities and deficiencies can only lead to inappropriate strategies and painful defeat, as the Vietnam conflict surely revealed.

4
Military Disposition

SUN-TZU SAID:

Sun- “In antiquity those that excelled in warfare first made themselves unconquerable in order to await the moment when the enemy could be conquered.

“Being unconquerable lies with yourself; being conquerable lies with the enemy.

“Thus one who excels in warfare is able to make himself unconquerable, but cannot necessarily cause the enemy to be conquerable.

“Thus it is said a strategy for conquering the enemy can be known but yet not possible to implement.

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“One who cannot be victorious assumes a defensive posture; one who can be victorious attacks. In these circumstances by assuming a defensive posture, strength will be more than adequate, whereas in offensive actions it would be inadequate.

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“Those who excel at defense bury themselves away below the lowest depths of Earth. Those who excel at offense move from above the greatest heights of Heaven. Thus they are able to preserve themselves and attain complete victory.

“Perceiving a victory that does not surpass what the masses could know is not the pinnacle of excellence.

Wrestling victories for which All under Heaven proclaim your excellence is not the pinnacle of excellence.

“Thus lifting an autumn hare cannot be considered great strength; seeing the sun and moon cannot be considered acute vision; hearing the sound of thunder cannot be considered having sensitive ears.

“Those that the ancients referred to as excelling at warfare conquered those who were easy to conquer. Thus the victories of those that excelled in warfare were not marked by fame for wisdom or courageous achievement. Thus their victories were free from errors.
One who is free from errors directs his measures toward certain victory, conquering those who are already defeated.

“Thus one who excels at warfare first establishes himself in a position where he cannot be defeated while not losing any opportunity to defeat the enemy.

“For this reason, the victorious army first realizes the conditions for victory, and then seeks to engage in battle. The vanquished army fights first, and then seeks victory.

“One who excels at employing the military cultivates the Tao and preserves the laws; therefore, he is able to be the regulator of victory and defeat.

“As for military methods: the first is termed measurement; the second, estimation of forces; the third, calculation of numbers of men; the fourth, weighing relative strength; and the fifth, victory.

“Terrain gives birth to measurement; measurement produces the estimation of forces. Estimation of forces gives rise to calculating the numbers of men. Calculating the

numbers of men gives rise to weighing strength. Weighing strength gives birth to victory.

“Thus the victorious army is like a ton compared with an ounce, while the defeated army is like an ounce weighed against a ton! The combat of the victorious is like the sudden release of a pent-up torrent down a thousand-fathom gorge. This is the strategic disposition of force.”

COMMENTARY

This chapter essentially expands Sun-tzu’s basic concept of fighting only when victory can be secured, for in it he advocates assuming a strong defensive posture when victory cannot be foreseen. While doubt and trepidation can destroy an army, foolhardiness and false courage can equally doom it to extinction. Throughout history a strong defense has proved a potent offensive weapon because it forces the enemy to deal with ensconced troops, assaulting them on a well-chosen battleground whose configuration should magnify the defender’s natural advantage. Thus Sun-tzu advised that “by assuming a defensive posture, strength will be more than adequate.” Conversely, attacking a superior foe, contending with insurmountable advantages without imaginative tactical plans can only result in defeat and destruction.

Once the commander has ensured that his army cannot be defeated, he should manipulate the enemy to fashion the requisite conditions for an easy victory and then immediately exploit them. As Sun-tzu points out, when the enemy has been enervated and disordered, they become

easy prey even though still appearing formidable. However, when victory quickly results, the ordinary man will perceive only the rapid vanquishment of a debilitated army, and thus an easy—rather than astute—victory. Clearly the lesson to be learned, whether on the battlefield or otherwise, is that one must refrain from committing one's forces until the proper moment, a moment not simply awaited but instead crafted to be thoroughly advantageous.

In this chapter Sun-tzu also introduces the concept of appropriate force levels and the importance of correlating them to the task and terrain at hand. (Although unmentioned, the ancient military writers were acutely aware that over-concentrating the army's strength would hamper flexibility, while too dispersed or insufficient a force would simply bludgeon themselves into non-existence on open terrain. Similarly, throwing too many bodies at a task—whether it be planning, sales, or physical activities—causes friction and thwarts decision- making, while too few may well prove insufficient to the challenge.)

The best measurements merely provide an estimation of the forces required to achieve victory. Even more significant is the implementation of command and control measures that exploit the army's full potential and utilize advantageous terrain to simply overwhelm the enemy with "strategic power." This concept, fully explicated in subsequent chapters, com- bines raw power with positional and other advantages, ensuring that the enemy cannot escape the circumstances of his fate.

5
Strategic Military Power

SUN-TZU SAID:

Sun- “In general, commanding a large number is like commanding a few.

It is a question of dividing up the numbers. Fighting with a large number is like fighting with a few. It is a question of configuration and designation.

“What enable the masses of the Three Armies invariably to withstand the enemy without being defeated are the unorthodox and orthodox.

“If wherever the army attacks it is like a whetstone thrown against an egg, it is due to the vacuous and substantial.

“In general, in battle one engages with the orthodox and gains victory through the unorthodox. Thus one who excels at sending forth the unorthodox is as inexhaustible as Heaven, as unlimited as the Yangtze and Yellow rivers. What reach an end and begin again are the sun and moon. What die and are reborn are the four seasons.

“The notes do not exceed five, but the changes of the five notes can never be fully heard. The colors do not exceed five, but the changes of the five colors can never be completely seen. The flavors do not exceed five, but the changes of the five flavors can never be completely tasted. In warfare the strategic configurations of power do not exceed the unorthodox and orthodox, but the changes of the unorthodox and orthodox can never be completely exhausted. The unorthodox and orthodox mutually produce

each other, just like an endless cycle. Who can exhaust them?

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“The strategic configuration of power is visible in the onrush of pent-up water tumbling stones along. The effect of constraints is vis-

ible in the onrush of a bird of prey breaking the bones of its target. Thus the strategic configuration of power of those that excel in warfare is sharply focused, their constraints are precise. Their strategic configuration of power is like a fully drawn crossbow, their constraints like the release of the trigger.

“Intermixed and turbulent, the fighting appears chaotic, but they cannot be made disordered. In turmoil and confusion, their deployment is circular, and they cannot be defeated.

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“Simulated chaos is given birth from control; the illusion of fear is given birth from courage; feigned weakness is given birth from strength. Order and disorder are a question of numbers; courage and fear are a question of the strategic configuration of power; strength and weakness are a question of the deployment of forces.

“Thus one who excels at moving the enemy deploys in a configuration to which the enemy must respond. He offers something that the enemy must seize. With profit he moves them, with the foundation he awaits them.

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“Thus one who excels at warfare seeks victory through the strategic configuration of power, not from reliance on men. Thus he is able to select men and employ strategic power.

“One who employs strategic power commands men in battle as if he were rolling logs and stones. The nature of wood and stone is to be quiet when stable but to move when on precipitous ground. If they are square they stop, if round they tend to move. Thus the strategic power of one who excels at employing men in warfare is comparable to rolling round boulders down a thousand-fathom mountain. Such is the strategic configuration of power.”

COMMENTARY

Several important tactical concepts receive their initial formulation in this chapter, including the conjoined “unorthodox and orthodox” and strategic power, both extensively discussed in the Introduction. However, the basis for successfully implementing any strategy can only be effective command and control that, for the armies of ancient China, entailed hierarchical organization strictly imposed in multiples of five from the squad on up through brigades and armies. Furthermore, strictly defined organization means that the commander exerts his will through his troops just as if commanding a single man, a remarkable analytical concept in Sun-tzu’s era. (Apart from the military realm, strict hierarchical command structures—being associated with megalithic organizations and vertical responsibility—are presently disdained in favor of diffuse

responsibility, downsizing, small group initiatives, and local autonomy. Even military theory experiences cycles in emphasis, generally reducing the individual soldiers to automatons, but sometimes stressing initiative and flexibility.) By creating an immediately responsive army, complex deceptive measures can be successfully executed to manipulate the enemy, to compel them into disadvantageous situations or entice them onto killing grounds where their destruction will be inevitable.

Employing unorthodox tactics has long been much disdained in the West, often at the cost of innumerable lives both on and off the battlefield. While the unorthodox in itself attracts, even mesmerizes some, in general it stimulates a naive sense of “not playing fair” irrespective of harsh environmental realities. However, the unorthodox and orthodox are, in good Taoist conceptualization, merely two complementary aspects, neither more inherently valueladen than any surgical technique. Unorthodox measures have been inappropriately applied, resulting in failure, and utilized by villains for perverse purposes, but cannot be condemned for their underlying intentions. Rather, the unorthodox and the concept of the conjoined unorthodox-orthodox pair provide the disadvantaged—whether outnumbered, weak, lacking connections, or inexperienced—with a perspective for envisioning alternative approaches and a method for converting their situations to advantage.

The simplest battlefield scenario results when one force finds itself significantly outnumbered, and the normal orthodox response would be to hastily establish a fully, though lightly, defended perimeter while hoping that fervent fighting might beat back the enemy’s assault. (It might be recalled that defenders historically enjoyed a three to one advantage, assuming they were not totally incompetent or exhausted.) Among the numerous possible unorthodox responses in this situation, the one most commonly seen in China began by feigning the establishment of fixed defenses, such as by constructing highly visible palisades,

and discouraging immediate attacks by misleading the enemy about actual troop strength with dummies, raising dust, and other simple measures. Thereafter, forces were concentrated at an enemy's weak point to effect a breakout followed by obviously pell-mell flight. However, the retreat's haste and disorder would merely be a ruse to draw the enemy after them, setting the tactical stage for a sudden counterattack, one often supplemented by flank or rear assaults by small units clandestinely segmented off amid the retreat's dust and confusion. (T'ien Tan's use of fire-oxen to effect a midnight breakout is of course a particularly famous example of this strategy, one that is extensively discussed in our forthcoming *History of Warfare in China* and also briefly retold in our companion work, *One Hundred Unorthodox Strategies.*) The particular tactic is unimportant; the ability to visualize alternative, nonorthodox methods in any situation marks a master of the unorthodox.

6
Vacuity and Substance

SUN-TZU SAID:

“In general, whoever occupies the battleground first and awaits the enemy will be at ease; whoever occupies the battleground afterward and must race to the conflict will be fatigued. Thus one who excels at warfare compels men and is not compelled by other men.

“In order to cause the enemy to come of their own volition, extend some apparent profit. In order to prevent the enemy from coming forth, show them the potential harm.

“Thus if the enemy is rested you can tire him; if he is well fed you can make him hungry; if he is at rest you can move him. Go forth to positions to which he must race. Race forth where he does not expect it.

“To travel a thousand kilometers without becoming fatigued, traverse unoccupied terrain. To ensure taking the objective in an attack, strike positions that are undefended. To be certain of an impregnable defense, secure positions that the enemy will not attack.

“Thus when someone excels in attacking, the enemy does not know where to mount his defense; when someone excels at defense, the enemy does not know where to attack. Subtle! Subtle! It approaches the formless. Spiritual! Spiritual! It attains the soundless.
Thus he can be the enemy’s Master of Fate.

“To effect an unhampered advance, strike their vacuities. To effect a retreat that cannot be overtaken, employ unmatchable speed. Thus if I want to engage in combat, even though the enemy has high ramparts and deep moats, he cannot avoid doing battle because I attack objectives he must rescue.

“If I do not want to engage in combat, even though I merely draw a line on the ground and defend it, he will not be able to engage me in battle because we thwart his movements.

“Thus if I determine the enemy’s disposition of forces while I have no perceptible form, I can concentrate my forces while the enemy is fragmented. If we are concentrated into a single force while he is fragmented into ten, then we attack him with ten times his strength. Thus we are many and the enemy is few. If we can attack his few with our many, those whom we engage in battle will be severely constrained.

“The location where we will engage the enemy must not become known to them. If it is not known, then the positions they must prepare to defend will be numerous. If the positions the enemy prepares to defend are numerous, then the forces we will engage will be few. Thus if they prepare to defend the front, to the rear there will be few men. If they defend the rear, in the front there will be few. If they prepare to defend the left flank, then on the right there will be few men. If they prepare to defend the right flank, then on the left there will be few men. If there is no position left undefended, then there will not be any place with more than a few. The few are the ones who prepare against others; the many are the ones who make others prepare against them.

“Thus if one knows the field of battle and knows the day of battle, he can traverse a thousand kilometers and assemble to engage in combat. If he does not know the field of battle nor know the day for battle, then the left flank cannot aid the right nor the right flank aid the left; the front cannot aid the rear nor the rear aid the front. How much more so when the distant are some tens of kilometers away and the near several kilometers apart? As I analyze it, even though Yüeh’s army is numerous, of what great advantage is it to them for attaining victory? Thus I say victory can be achieved. Even though the enemy is more numerous, they can be forced not to fight.

“Thus critically analyze them to know the estimations for gain and loss. Stimulate them to know the patterns of their movement and stopping. Determine their disposition of

force to know the tenable and fatal terrain. Probe them to know where they have an excess, where an insufficiency.

“Thus the pinnacle of military deployment approaches the formless. If it is formless, then even the deepest spy cannot discern it or the wise make plans against it.

“In accord with the enemy’s disposition we impose measures on the masses that produce victory, but the masses are unable to fathom them. Men all know the disposition by which we attain victory, but no one knows the configuration through which we control the vic- tory. Thus a victorious battle strategy is not repeated, the configurations of response to the enemy are inexhaustible.

“Now the army’s disposition of force is like water. Water’s configuration avoids heights and races downward. The army’s disposition of force avoids the substantial and strikes the vacuous. Water configures its flow in accord with the terrain; the army controls its victory in accord with the enemy. Thus the army does not maintain any constant strategic configuration of power, water has no constant shape. One who is able to change and transform in accord with the enemy and wrest victory is termed spiritual. Thus none of the five phases constantly dominates; the four seasons do not have constant positions; the sun shines for longer and shorter periods; and the moon wanes and waxes.”

COMMENTARY

The chapter commences with another of Sun-tzu's paradigm statements that has applicability in numerous situations: "One who excels at warfare compels men and is not compelled by other men." The remaining paragraphs may then be understood as expansions of this principle coupled with concrete explications for attaining the ultimate objective of easy conquest. In particular, two insights demand emphasis: the enemy should be manipulated to frustrate and destabilize them, and every weakness should be exploited. The ultimate realization of the latter is to move the army wherever the enemy lacks a presence and strike their voids and vacuities, the locations they have left undefended. This requires foreknowledge, in concord with Sun-tzu's basic approach to the art of warfare, and efforts to deny the enemy accurate intelligence about one's own activities. In short, if the enemy is befuddled through various means, including deception, secrecy, and feints, they will not only be forced into inappropriate movements, but also compelled to mount significant defenses at numerous positions, thereby depleting their strength at the intended target. Moreover, properly focused efforts can result in weakness opposing strength, in the weary being forced to assault the rested, or the hungry to fight the well-fed.

Deception and manipulation—aspects of the greater question of form and the formless— have already been thoroughly discussed in the Introduction. However, in the chapter's last paragraphs Sun-tzu further characterizes the interrelationship of the disposition of force (or form) between the two sides. Certain important principles are buried within these paragraphs: variation is the essence of response, and only the commander knows the true configuration behind the visible disposition of force. Moreover, the relationship between strategic power and the disposition of force first becomes evident. Commentators have sometimes mistakenly understood the concept of response, believing that once the enemy moves and

commits himself, action must then be automatically taken in some fixed or predetermined way. However, Sun-tzu's entire chapter shows that the forms of response, while based upon the enemy's actual disposition and certain unchangeable principles and combat realities, should be freely chosen within these essential parameters. Flexibility, as distinguished from the traditional practice of fixed deployment in the Early Chou and seen in the West until recent times, is stressed rather than some form of invariant, useless determinism.

The Chinese military writers all emphasized the importance of being flexible, of varying tactics not only to suit individual circumstances, but also to avoid becoming predictable. While "never change a winning strategy" might be considered a cardinal rule of sports competition, certainly valid for the individual encounter, with repeated exposure to one's competitors— irrespective of the arena—thought should be given to Sun-tzu's dictum not to repeat a winning strategy. Otherwise, the enemy will eventually discern the patterns of control and the methods of conquest and conceive tactics to thwart them, going on to exploit any inherent weaknesses. The difficulty arises, as Sun Pin advises, in attempting to wrest victory with other than one's strength. Wisdom therefore lies in focusing efforts upon certain methods, but not to the detriment of alternatives. Keeping the enemy or competitors (or associates or friends) mystified as to one's intentions and capabilities expands the domain of freedom, but only if vacuities can be discerned and exploited in timely fashion.

More generally, in the absence of an invincible compensating strategy, one should never undertake tasks nor enter a potentially decisive conflict if inferior to the enemy. Therefore, skill in anticipation must be nurtured so that when a contest arises, you (or your team or company) will be thoroughly prepared, without suffering significant weakness or temporarily debilitating conditions, such as being exhausted, preoccupied with other conflicts, or under-

strength. Thereafter, the situation can and should be manipulated, the circumstances chosen, so that your efforts will be directed toward simply applying strategic power, realizing advantages attained through proper positioning and preparation. While, as is well known, “positioning” largely delimits the possibilities for marketing success, positional advantage is not confined to commercial realms alone. Any battle for business, any quest for success within corporate hierarchies, even confrontations on the street, requires discerning and swiftly assuming an advantageous position. Properly understood and exploited, strategic advantage can easily convert a potentially deadly situation into a rout of the enemy. (A simple concrete example might be a massive sales campaign designed to saturate the marketplace overnight with a new product, making it impossible for competitors to respond or gain shelf space. This approach might of course be localized, rather than national, and thereby establish an item’s viability. Similarly, striking vacuities might be understood as launching products that will achieve major success in niche markets, perhaps even define such markets.) In personal combat, availing oneself of higher ground, solid protection to the rear (such as a building or fence), or any weapons ready to hand will immediately multiply your available force and therefore strategic power. With length or other finite advantage, one can strike an aggressor’s undefended vacuities, utilizing, for example, a stick or umbrella to attack an assailant’s legs while threatening his head. In sports, attacking voids and vacuities means striking where they are weakest. A simple example from basketball would be to stress speed against a slower opponent, opening up the court for easy baskets; however, many similar applications immediately follow.

7
Military Combat

SUN-TZU SAID:

“In general, the strategy for employing the army is this: From the time the general receives his commands from the ruler, unites the armies, and assembles the masses, to confronting the enemy and encamping, there is nothing more difficult than military combat. In military combat what is most difficult is turning the circuitous into the straight, turning adversity into advantage.

“Thus if you make the enemy’s path circuitous and entice them with profit, although you set out after them you will arrive before them. This results from knowing the tactics of the circuitous and the direct.

“Thus combat between armies is advantageous; combat between masses is dangerous. If the entire army contends for advantage, you will not arrive in time. If you reduce the army’s size to contend for advantage, your baggage and heavy equipment will suffer losses.

“For this reason if you abandon your armor and heavy equipment to race forward day and night without encamping, covering two days normal distance at a time, marching forward a hundred kilometers to contend for gain,

the Three Armies' generals will be captured. The strong will be first to arrive, while the exhausted will follow. With such tactics only one in ten will reach the battle site. If one contends for gain fifty kilometers away, it will cause the general of the Upper Army to stumble, and by following such tactics half the men will reach the objective. If you contend for gain at thirty kilometers then two-thirds of the army will reach the objective.

"Accordingly, if the army does not have baggage and heavy equipment it will be lost; if it does not have provisions it will be lost; if it does not have stores it will be lost.

"Thus one who does not know the plans of the feudal lords cannot prepare alliances beforehand. Someone unfamiliar with the mountains and forests, gorges and defiles, the shape of marshes and wetlands cannot advance the army. One who does not employ local guides cannot gain advantages of terrain.

"Thus the army is established by deceit, moves for advantage, and changes through segmenting and reuniting. Thus its speed is like the wind, its slowness like the forest; its invasion and plundering like a fire; unmoving, it is like the mountains. It is as difficult to know as the darkness; in movement it is like thunder.

"When you plunder a district, divide the wealth among your troops. When you enlarge your territory, divide the profits. Take control of the strategic balance of power and

move. The one who first understands the tactics of the circuitous and the direct will be victorious. This is the strategy for military combat.

“The *Military Administration* states: ‘Because they could not hear each other they made gongs and drums; because they could not see each other they made pennants and flags.’ Gongs, drums, pennants, and flags are the means to unify the men’s ears and eyes. When the men have been unified the courageous will not be able to advance alone, the fearful will not be able to retreat alone. This is the method for employing large numbers.

“Thus in night battles make the fires and drums numerous, and in daylight battles make the flags and pennants numerous in order to change the men’s ears and eyes.

“The *ch’i* (spirit) of the Three Armies can be snatched away; the commanding general’s mind can be seized. For this reason in the morning their *ch’i* is ardent; during the day their *ch’i* becomes indolent; at dusk their *ch’i* is exhausted. Thus one who excels at employing the army avoids their ardent *ch’i* and strikes when it is indolent or exhausted. This is the way to manipulate *ch’i.*

“In order await the disordered; in tranquility await the clamorous.
This is the way to control the mind.

“With the near await the distant; with the rested await the fatigued; with the sated await the hungry. This is the way to control strength.

“Do not intercept well-ordered flags; do not attack well-regulated formations. This is the way to control changes.

“Thus the strategy for employing the military: Do not approach high mountains; do not confront those who have hills behind them.

Do not pursue feigned retreats. Do not attack animated troops. Do not swallow an army acting as bait. Do not obstruct an army retreating homeward. If you besiege an army you must leave an outlet. Do not press an exhausted invader. These are the strategies for employing the military.”

COMMENTARY

The brief statement, “combat between armies is advantageous; combat between masses is dangerous,” embodies the chapter’s focal thought. Simply fielding a vast number of men garbed as soldiers wastes resources and yields only defeat because they lack the cohesion and discipline required to constitute an army and thereby implement the commander’s vision. Furthermore, any

activity—such as rushing forward without logistical support—that debilitates the troops or disrupts their unity again turns them into an ineffectual mass, essentially a rabble for the enemy to prey upon. Therefore Sun-tzu characterizes a real army (and by implication any integrated organization) as swift but unified when in motion, constrained and solid when at rest. The commander must act to ensure his army remains a viable instrument— explaining the chapter's emphasis upon exploiting the various means of communication for unifying the men—while appropriately evolving tactics that manipulate the enemy, forcing them to move about, become frustrated, disordered, and dispirited. Accordingly, he must be cognizant of the factor of *ch'i* or spirit, already discussed in the Introduction, striving to incite and appropriately maximize it in his own men while simultaneously avoiding an animated enemy in a similar state, striking when their morale is weakest. Combat being a matter of deadly force, only the foolish disdain manipulatory tactics to rush headlong at strong enemies, into defeat.

"Military Combat" also includes one of the few pronouncements on deceit found in the text, "thus the army is established by deceit." As discussed in the Introduction, Sun-tzu was often misidentified solely with a doctrine of deceit and frequently excoriated for it; however, deceit and deception merely comprise one of the vital techniques available to every commander for manipulating the enemy and gaining the strategic advantage necessary to achieve victory. Conversely, one avoids being deceived through the use of spies and observers, recon- naissance and local guides. Significant blunders may be avoided simply by obtaining accurate information about the terrain, the field of competition, the market, or domain of possibility.

The chapter concludes with a series of specific tactical pronouncements that subsequently became vital lessons and were emphasized throughout the military writings. Like others scattered throughout the *Art of War,* many of them are simply Sun-tzu's tactical principles turned about,

suddenly adopted by the enemy, and must be guarded against. The two most famous are never pressing a cornered enemy (even though still exploiting the situation to vanquish them) and avoiding being trapped by ruses or enticed by apparent profits. Both retain applicability in many areas, ranging from business to personal relationships, often remaining unlearned by lower echelon military commanders until their troops blunder into avoidable disasters.

8
Nine Changes

SUN-TZU SAID:

"In general, the strategy for employing the military is this. After the general has received his commands from the ruler, united the armies, and assembled the masses:

Do not encamp on entrapping terrain.
Unite with your allies on focal terrain.
Do not remain on isolated terrain.
Make strategic plans for encircled terrain.
On fatal terrain you must do battle.
There are roads that are not followed.
There are armies that are not attacked.
There are fortified cities that are not assaulted.
There is terrain for which one does not contend.
There are commands from the ruler that are not accepted.

"As for the roads that are not followed: when we enter enemy territory shallowly, then affairs to the fore will not be known. When we enter deeply, then advantages to the rear cannot be consolidated. If we move then it will not be advantageous; if we remain still then we will be imprisoned. In such cases do not follow them.

“As for armies that are not attacked: our two armies have intercepted each other and encamped. We estimate that our strength is sufficient to destroy their army and capture their general. However, if we estimate it from a long-range perspective, there are those who excel in unorthodox strategic power and skillful tactics among them, and the army is well-ordered. In such cases, even though the army can be attacked, do not attack it.

“As for fortified cities that are not assaulted: We estimate that our strength is sufficient to seize a city. If we seize it, it will not be of any advantage to the fore; if we gain it we will not be able to protect it to the rear. If our strength equals theirs, the city certainly will not be taken. If, when we gain the advantages of a forward position the city will then surrender by itself, while if we do not gain such advantages the city will not cause harm to the rear—in such cases, even though a city can be assaulted, do not assault it.

“As for terrain that is not contested: in mountain valleys where the water is unable to sustain life, do not contend for the terrain.

“As for orders of the ruler which are not implemented: if the ruler’s orders are contrary to these ‘four changes,’ then do not implement the ruler’s orders. One who truly understands the changes in affairs knows how to employ the military.

“Thus the general who has a penetrating understanding of the advantages of the nine changes knows how to employ the army. If a general does not have a penetrating understanding of the advantages of the nine changes, even though he is familiar with the topography, he will not be able to realize the advantages of terrain.

“One who commands an army but does not know the techniques for the nine changes, even though he is familiar with the five advantages, will not be able to control men.

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“For this reason the wise must contemplate the intermixture of gain and loss. If they discern advantage in difficult situations, their efforts can be trusted. If they discern harm in prospective advantage, difficulties can be resolved.

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“Accordingly, subjugate the feudal lords with potential harm; labor the feudal lords with numerous affairs; and have the feudal lords race after profits.

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“Thus the strategy for employing the army: Do not rely on their not coming, but depend on our having the means to await them. Do not rely on their not attacking, but depend on our having an unassailable position.

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“Thus generals have five dangerous character traits:

One committed to dying can be slain.

One committed to living can be captured.

One easily angered and hasty to act can be insulted.

One obsessed with being scrupulous and untainted can be shamed.

One who loves the people can be troubled.

“Now these five dangerous traits are excesses in a general, potential disaster for employing the army. The army’s destruction and the general’s death will invariably stem from these five, so they must be investigated.”

COMMENTARY

With the exception of the last paragraph, this chapter is devoted to advancing the concept of analytically evaluating the battlefield and constantly effecting defensive preparations so as to avoid being caught by surprise. The initial section offers some particular observations for specific terrains in consonance with Sun-tzu's general concept of configurations of terrain that has already been discussed in the Introduction. (The traditionally received text has been supplemented by five paragraphs from the recently discovered tomb texts, beginning with "As for roads that are not followed.")

Sun-tzu reiterates that knowledge of the topography, gained through local guides and reconnaissance, is critical to commanding and deploying the army—not only to discover the enemy's position, but also to simply understand the nature of the terrain, the difficulties it poses, and the potential advantages offered. Many famous battles this century—both corporate and military—were lost because leaders simply neglected to scout the terrain and shape their actions accordingly. Insofar as no situation is simply positive, but encompasses both advantages and disadvantages, the general must carefully scrutinize the possibilities and then formulate a course of action which will permit him to decline ominous engagements. For this reason the army must always prepare strong defensive positions, or at least plan well for them, in order to avoid disadvantageous engagements.

The final section preserves some of Sun-tzu's insights into the flaws and liabilities of commanders. The first two form a correlated pair—being over-committed to living and thus afraid of dying, and being committed to dying gloriously, irrespective of other alternatives— that severely cloud a commander's judgment and can be easily exploited.

Those committed to dying often prove too rash, those obsessed with life too timid. Moreover, commanders with a tendency to react precipitously or become angered can of course be insulted, provoked to thoughtless action, while a concern for reputation rather than results can lead to disdaining viable courses of action. Perhaps most significant of all is the last, “one who loves the people can be troubled,” for it apparently runs contrary to the emphasis that most military writers, including Sun-tzu, placed upon the welfare of the people and benevolent policies directed toward them. However, the intent of his warning becomes clear from collateral Warring States writings: a commander (or ruler) who overly loves his people is often unable to sacrifice them individually for the welfare of the state and good of the populace. Thus a leader becomes too cautious, too fearful of losses, but contrary to his desire ends up wasting his entire force, often in small-scale, ineffectual attacks. (Examples of this are clearly seen in World War II where timidity coupled with a fear of taking casualties prevented generals from exploiting opportunities, led to costly blunders, and lengthened the war. Moreover, as several observers have pointed out, this “love of the people” characterizes the contemporary American political climate. Every skirmish produces much overwrought verbiage in the popular press, every casualty cries to withdraw from a conflict.) While every life is immensely valuable, and warfare certainly to be condemned and avoided, the Chinese military writers clearly understood that when it becomes inevitable, the commander who can bear to sacrifice a major portion of his troops to achieve victory will prevail. Thus, paradoxically, a certain ruthlessness marks the most benevolent course. Clearly there are implications for largescale organizations, and for leadership in general. The CEO, president, or divisional manager must be focused upon the task, unconcerned with personal reputation, and neither overly immersed in the dramatics and thrill of great struggles nor timidly shunning them out of

fear of loss. Writ larger, Sun-tzu would no doubt counsel that the essential lesson of life is to nurture self-control and be willing to undertake action without being perturbed either by the extremes of seeking life (avoiding risk) or avoiding death (declining risk). Anger—except in actual physical combat—always proves counterproductive.

9
Maneuvering the Army

SUN-TZU SAID:

“As for deploying the army and fathoming the enemy:

“To cross mountains follow the valleys, search out tenable ground, and occupy the heights. If the enemy holds the heights, do not climb up to engage them in battle. This is the way to deploy an army in the mountains.

“After crossing rivers you must distance yourself from them. If the enemy is fording a river to advance, do not confront them in the water. When half their forces have crossed, it will be advantageous to strike them. If you want to engage the enemy in battle, do not array your forces near the river to confront the invader but look for tenable ground and occupy the heights. Do not confront the current’s flow. This is the way to deploy the army where there are rivers.

“When you cross salt marshes and wetlands, concentrate on quickly getting away from them; do not remain. If you engage in battle in marshes or wetlands, you must stay in areas with marsh grass and keep groves of trees at your back. This is the way to deploy the army in marshes and wetlands.

“On level plains deploy on easy terrain with the right flank positioned with high ground to the rear, fatal terrain to the fore, and tenable terrain to the rear. This is the way to deploy on the plains.

“These four deployments, advantageous to the army, are the means by which the Yellow Emperor conquered the four emperors.

“Now the army likes heights and abhors low areas, esteems the sunny and disdains the shady. It nourishes life and occupies the substantial. An army that avoids the hundred illnesses is said to be certain of victory.

“Where there are hills and embankments you must occupy the *yang* (sunny) side, keeping them to the right rear. This is to the army’s advantage and exploits the natural assistance of the terrain.

“When it rains upstream, foam appears. If you want to ford the river, wait until it settles.

“You must quickly get away from deadly configurations of terrain such as precipitous gorges with mountain torrents, Heaven’s Well, Heaven’s Jail, Heaven’s Net, Heaven’s Pit, and Heaven’s Fissure. Do not approach them. When we keep them at a distance, the enemy is forced to approach them. When we face them, the enemy is compelled to have them at their rear.

“When on the flanks the army encounters ravines and defiles, wetlands with reeds and tall grass, mountain forests or areas with heavy, entangled undergrowth, you must thoroughly search them because they are places where an ambush or spies would be concealed.

“If an enemy in close proximity remains quiet, they are relying on their tactical occupation of ravines. If while far off they challenge you to battle, they want you to advance because they occupy easy terrain to their advantage.

“If large numbers of trees move, they are approaching. If there are many visible obstacles in the heavy grass, it is to make us suspicious. If the birds take flight, there is an ambush. If the animals are afraid, enemy forces are mounting a sudden attack.

“If dust rises high up in a sharply defined column, chariots are coming. If it is low and broad, the infantry is advancing. If it is dispersed in thin shafts, they are gathering firewood. If it is sparse, coming and going, they are encamping.

“One who speaks deferentially but increases his preparations will advance. One who speaks belligerently and advances hastily will retreat.

“One whose light chariots first fan out to the sides is deploying for battle.

“One who seeks peace without setting any prior conditions is executing a stratagem.

“One whose troops race off but who deploys his army into formation is implementing a predetermined schedule.

“One whose troops half advance and half retreat is enticing you.

“Those who stand about leaning on their weapons are hungry. If those who draw water drink first, they are thirsty. When they see potential gain but do not know whether to advance, they are tired.

“Where birds congregate it is empty. If the enemy cries out at night, they are afraid. If the army is turbulent, the general lacks severity. If their flags and pennants move about, they are in chaos. If the officers are angry, they are exhausted.

“If they kill their horses and eat the meat, the army lacks grain. If they hang up their cooking utensils and do not return to camp, they are an exhausted invader.

“One whose troops repeatedly congregate in small groups here and there, whispering together, has lost the masses. One who frequently grants rewards is in deep distress. One who frequently imposes punishments is in great difficulty. One who is at first excessively brutal and then fears the masses is the pinnacle of stupidity.

“One who has emissaries come forth with offerings wants to rest for a while.

“If their troops are aroused and approach our forces, only to maintain their positions without engaging in battle or breaking off the confrontation, you must carefully investigate it.

“The army does not esteem the number of troops being more numerous for it only means one cannot aggressively advance. It is sufficient for you to muster your own strength, analyze the enemy, and take them. Only someone who lacks strategic planning and slights an enemy will inevitably be captured by others.

“If you impose punishments on the troops before they have become attached, they will not be submissive. If they are not submissive, they will be difficult to employ. If you do not impose punishments after the troops have become attached, they cannot be used.

“Thus if you command them with the civil and unify them through the martial, this is what is referred to as ‘being certain to take them.’

“If orders are consistently implemented to instruct the people, then the people will submit. If orders are not consistently implemented to instruct the people, then the people will not submit. One whose orders are consistently carried out has established a mutual relationship with the people.”

COMMENTARY

As the title indicates, much of “Maneuvering the Army” focuses upon types of terrain either conducive or inimical to maneuvering and emplacing military forces, with certain specific, if limited, guidelines for different topography such as river areas and wetlands. In general, one should avoid ground which provides the enemy with potential cover, as well as constricted areas that might become killing grounds. (Obviously this has tactical implications for life situations, whether business, legal, or personal defense.) Sun-tzu was probably the first to categorize many of these problematic terrains, although experienced commanders were certainly aware of—and sought to avoid or exploit—them long before Sun-tzu appeared.

Sun-tzu also offers a number of discrete observations potentially useful to fathoming enemy behavior, ranging from physical observations near the battlefield to diplomatic awareness. Among the most famous, relevant to contemporary conflicts as well as historical debates, is “One who seeks peace without setting any prior conditions is executing a stratagem.” Several of his concrete clues, simplistic but doubtlessly the product of careful analysis,

provide the essential wisdom lower level commanders must absorb early on if their men are to survive.

The final four paragraphs return to fundamental concepts fraught with far-reaching implications. The belief that troop strength is not the sole determinant of a battle's outcome is pivotal not only to Sun-tzu's thought, but Chinese military thought in general, and constitutes the basic premise of maneuver warfare. In fact, throughout history commanders with superior numbers or stronger component forces have frequently slighted their enemies and neglected collateral measures, suffering extremely severe consequences.

The last three paragraphs, which focus on the issue of command and control, are also fundamental to later Chinese military thought. Three essential issues are reprised here: First, the need to balance punishments with measures to nurture the troops' emotional allegiance, and to apply punishments only after this emotional basis has been fostered. Second, the essential unity of the civil and martial, the former being the realm of virtue, deference, beneficence, and rewards, the latter directness, energy, strict commands, and punishments. Third, integral to every command, certainty in the orders, trust in the directives, confidence in the actions undertaken, all marked by unremitting consistency. As the later military writings indicate, doubts about the commander's orders must never be permitted to arise; therefore, even though erroneous, orders should never be revised or rescinded—a concept certainly lacking in a contemporary age where statements and directives are reinterpreted, even redefined, virtually moments after being issued.

10
Configurations of Terrain

SUN-TZU SAID:

"The major configurations of terrain are accessible, suspended, stalemated, constricted, precipitous, and expansive.

"If we can go forth and the enemy can also advance, it is termed 'accessible.' In an accessible configuration, first occupy the heights and *yang* (sunny) side, and improve the routes for transporting provisions. Then when we engage in battle, it will be advantageous.

"If we can go forth but it will be difficult to return, it is termed 'suspended.' In a suspended configuration, if they are unprepared go forth and conquer them. If the enemy is prepared and we sally forth without being victorious, it will be difficult to turn back and is not advantageous.

"If it is not advantageous for us to go forth nor advantageous for the enemy to come forward, it is termed 'stalemated.' In a stalemated configuration, even though the enemy tries to entice us with profit, we do not go forth. Withdraw our forces and depart. If we strike them when half the enemy has come forth, it will be advantageous.

"As for constricted configurations, if we occupy them first we must fully deploy throughout them in order to await the enemy. If the enemy occupies them first and fully deploys in them, do not follow them in. If they do not fully deploy in them, then follow them in.

"As for precipitous configurations, if we occupy them we must hold the heights and *yang* sides to await the enemy. If the enemy occupies them first, withdraw our forces and depart.

Do not follow them.

“As for expansive configurations, if our strategic power is equal, it will be difficult to provoke them to combat. Engaging in combat will not be advantageous.

“Now these six are the Tao of terrain. Any general who undertakes responsibility for command cannot but investigate them.

“Configuration of terrain is an aid to the army. Analyzing the enemy, taking control of victory, estimating ravines and defiles, the distant and near, is the Tao of the superior general. One who knows these and employs them in combat will certainly be victorious. One who does not know these or employ them in combat will certainly be defeated.

“There are six types of ill-fated armies: running off, lax, sinking, crumbling, chaotic, and routed. Now these six are not disasters brought about by Heaven and Earth but by the general’s errors.

“Now if, when their strategic power is equal, one attacks ten, it is termed ‘running off.’

“If the troops are strong but the officers are weak, it is termed ‘lax.’

“If the officers are strong but the troops weak, it is termed ‘sinking.’

“If the higher officers are angry and insubordinate, engaging the enemy themselves out of unrestrained anger while the general does not yet know their capability, it is termed ‘crumbling.’

“If the general is weak and not strict, unenlightened in his instructions and leadership; the officers and troops lack constant duties; and their deployment of troops into formation is askew, it is termed ‘chaotic.’

“If the general, unable to fathom the enemy, engages a large number with a small number, attacks the strong with the weak while the army lacks a properly selected vanguard, it is termed routed.

“Now these six are the Tao of defeat. Any general who undertakes responsibility for command cannot but investigate them.

“When the general regards his troops as young children, they will advance into the deepest valleys with him. When he regards the troops as his beloved children, they will be willing to die with him.

“If they are well treated but cannot be employed, if they are loved but cannot be commanded, or when in chaos they cannot be governed, they may be compared to arrogant children and cannot be used.

“If the Tao of Warfare indicates certain victory, even though the ruler has instructed that combat should be avoided, if you must engage in battle it is permissible. If the Tao of Warfare indicates you will not be victorious, even though the ruler instructs you to engage in battle, not fighting is permissible.

“Thus a general who does not advance to seek fame, nor fail to retreat to avoid being charged with the capital offense of retreating, but seeks only to preserve the people and gain advantage for the ruler is the state’s treasure.

“If I know our troops can attack, but do not know the enemy cannot be attacked, it is only halfway to victory. If I know the enemy can be attacked, but do not realize our troops cannot attack, it is only halfway to victory.

“Knowing that the enemy can be attacked, and knowing that our army can Thus one who truly knows the army will never be deluded when he moves, never be impoverished when initiating an action.

“Thus it is said if you know them and know yourself, your victory will not be imperiled. If you know Heaven and know Earth, your victory can be complete.”

11
Nine Terrains

SUN-TZU SAID:

“The strategy for employing the military is this: There is dispersive terrain, light terrain, contentious terrain, traversable terrain, focal terrain, heavy terrain, entrapping terrain, encircled terrain, and fatal terrain.

“When the feudal lords fight in their own territory, it is ‘dispersive terrain.’

“When they enter someone else’s territory, but not deeply, it is ‘light terrain.’

“If when we occupy it, it will be advantageous to us, while if they occupy it, it will be advantageous to them, it is ‘contentious terrain.’

“When we can go and they can also come, it is ‘traversable terrain.’

“Land of the feudal lords surrounded on three sides such that whoever arrives first will gain the masses of All under Heaven is ‘focal terrain.’

“When one penetrates deeply into enemy territory, bypassing numerous cities, it is ‘heavy terrain.’

“Where there are mountains and forests, ravines and defiles, wetlands and marshes, wherever the road is difficult to negotiate, it is ‘entrapping terrain.’

“Where the entrance is constricted, the return is circuitous, and with a small number they can strike our masses, it is ‘encircled terrain.’

“Where if one fights with intensity he will survive, but if he does not fight with intensity he will perish, it is ‘fatal terrain.’

“For this reason on dispersive terrain do not engage the enemy.

“On light terrain do not stop.

“On contentious terrain do not attack.

“On traversable terrain do not allow your forces to become isolated.

“On focal terrain unite and form alliances with nearby feudal lords.

“On heavy terrain plunder for provisions.

“On entrapping terrain move through quickly.

“On encircled terrain use strategy.

“On fatal terrain engage in battle.

“In antiquity those who were referred to as excelling in the employment of the army were able to keep the enemy’s forward and rear forces from connecting; the many and few from relying on each other; the noble and lowly from coming to each other’s rescue; the upper and lower ranks from trusting each other; the troops to be separated, unable to reassemble, or when assembled, not to be wellordered. They moved when it was advantageous, halted when it was not advantageous.

“If I dare ask, if the enemy is numerous, disciplined, and about to advance, how should we respond to them? I would

say, first seize something that they love for then they will listen to you.

“It is the nature of the army to stress speed; to take advantage of the enemy’s absence; to travel unanticipated roads; and to attack when they are not alert.

“In general, the Tao of an invader is that when one has penetrated deeply into enemy territory, the army will be unified, and the defenders will not be able to conquer you.

“If one forages in the fertile countryside, then the Three Armies will have enough to eat. If you carefully nurture them and do not over-labor them, their *ch’i* will be united and their strength will be at maximum.

“When you mobilize the army and form strategic plans, you must be unfathomable.

“Cast them into positions from which there is nowhere to go and they will die without retreating. If there is no escape from death, the officers and soldiers will fully exhaust their strength.

“When the soldiers and officers have penetrated deeply into enemy territory, they will cling together. When there is no alternative, they will fight.

“For this reason even though the soldiers are not instructed, they are prepared; without seeking it, their cooperation is obtained; with- out covenants they are close together; without issuing orders they are reliable. Prohibit omens, eliminate doubt so that they will die without other thoughts.

“If our soldiers do not have excessive wealth, it is not because they detest material goods. If they do not live long lives, it is not because they abhor longevity. On the day that the orders are issued the tears of the soldiers who are sitting will soak their sleeves, while the tears of those lying down will roll down their cheeks. However, if you throw them into a hopeless situation, they will have the courage of Chu or Kuei.

“Thus one who excels at employing the army may be compared to the snake known as the *shuaijan.* The *shuaijan* is found on Mt.
Ch’ang. If you strike its head the tail will respond; if you strike its tail the head will respond. If you strike the middle of the body both the head and tail will react. If I dare ask, can we make the army like the *shuaijan,* I would say we can.

For example, the people of Wu and Yüeh hate each other; but if they encounter a severe wind when crossing a river in a single boat, their efforts to rescue each other will be like the left and right hands.

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“For this reason fettering the horses and burying the chariot wheels are inadequate to rely on to prevent the soldiers from fleeing. Unify their courage to be as one through the Tao of administration. Realize the appropriate employment of the hard and soft through the patterns of terrain.

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“Thus one who excels at employing the army leads them by the hand as if they were only one man, so they cannot avoid it.

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“It is essential for a general to be tranquil and obscure, upright and self-disciplined, and able to stupefy the eyes and ears of the officers and troops, keeping them ignorant. He alters his management of affairs and changes his strategies to keep other people from recognizing them. He shifts his position and traverses indirect routes to keep other people from being able to anticipate him.

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“At the moment the general has designated with them, it will be as if they ascended a height and abandoned their ladders. The general advances with them deep into the

territory of the feudal lords and then releases the trigger. He commands them as if racing a herd of sheep—they are driven away, driven back, but no one knows where they are going.

“Assembling the masses of the Three Armies, casting them into danger, is the responsibility of the general.

“The nine transformations of terrain—the advantages deriving from contraction and expansion, the patterns of human emotions— must be investigated.

“In general, the Tao of the invader is this:

“When the troops have penetrated deeply, they will be unified, but where only shallowly, they will be inclined to scatter.

“When the army has left the state, crossed the enemy’s border, and is on campaign, it is ‘isolated terrain.’

“When the four sides are open to others, this is ‘focal terrain.’

“When you have advanced deeply, it is ‘heavy terrain.’

“If you have penetrated only shallowly, it is ‘light terrain.’

“If you have strongholds behind you and constrictions before you, it is ‘encircled terrain.’

“If there is no place to go, it is ‘fatal terrain.’

“For this reason on dispersive terrain I unify their will.

“On light terrain I have them group together.

“On contentious terrain I race our rear elements forward.

“On traversable terrain I focus on defense.

“On focal terrain I solidify our alliances.

“On heavy terrain I ensure a continuous supply of provisions.

“On entrapping terrain I speedily advance along the roads.

“On encircled terrain I obstruct any openings.

“On fatal terrain I show them that we will not live.

“Thus it is the nature of the army to defend when encircled; to fight fervently when unavoidable; and to follow orders when compelled by circumstances.

“For this reason one who does not know the plans of the feudal lords cannot forge preparatory alliances. One who does not know the topography of mountains and forests, ravines and defiles, wetlands and marshes cannot maneuver the army. One who does not employ local guides will not secure advantages of terrain. One who does not know one of these four or five cannot command the army of a hegemon or a true king.

“Now when the army of a hegemon or true king attacks a great state, their masses are unable to assemble. When it applies its awesomeness to the enemy, their alliances cannot be sustained. For this reason it does not contend with any alliances under Heaven. It does not nurture the

authority of others under Heaven. Have faith in yourself, apply your awesomeness to the enemy. Then his cities can be taken, his state can be subjugated.

“Bestow rewards not required by law, impose exceptional governmental orders. Direct the masses of the Three Armies as though commanding one man. Press affairs upon them, do not explain the purpose to them. Compel them with prospects for profit, but do not inform them about the potential harm.

“Cast them into hopeless situations and they will be preserved; have them penetrate fatal terrain and they will live. Only after the masses have penetrated dangerous terrain will they be able to craft victory out of defeat.

“The prosecution of military affairs lies in according with and learning in detail the enemy’s intentions. If one then focuses his strength toward the enemy, strikes a thousand kilometers away, and kills their general, it is termed ‘being skillful and capable in completing military affairs.’

“For this reason on the day the government mobilizes the army close the passes, destroy all tallies, and do not allow their emissaries to pass through. Hold intense strategic discussions in the upper hall of the temple in order to bring about the execution of affairs.

“If the enemy opens the door, you must race in.

“Attack what they love first. Do not fix any time for battle, assess and react to the enemy in order to determine the strategy for battle.

“For this reason at first be like a virgin at home; later—when the enemy opens the door— be like a fleeing rabbit. The enemy will be unable to withstand you.”

COMMENTARY

“Nine Terrains” extensively examines the various configurations of terrain introduced in “Maneuvering the Army” and “Configurations of Terrain,” suggesting tactical principles for mastering and exploiting them. However, rather than mere reiteration, Sun-tzu has partially refocused his analysis upon the psychology of invading armies and further extrapolated his basic insights to provide advice on how to elicit an ultimate effort from the troops. (In a chapter premised upon Sun-tzu’s analysis entitled “Distinction Between Guest and Host,” Sun Pin similarly examines the invader’s psychology, while further expansion will be found in Sun-tzu’s Chapter 14, recovered from the historical work known as the *T’ung Tien.*) In essence, contrary to the common expectation that both animals and people will fight

most fervently near home, Sun-tzu believed that soldiers tend to be unfocused—even distracted— when comfortable, when on familiar ground, but concentrated as their task becomes more challenging or impossible. When a project becomes all-consuming, when people are thrust onto fatal terrain, great efforts, even victory, result (although certainly at a significant cost in terms of emotional and mental energy, as well as casualties). The chief effect of casting people onto fatal terrain is well expressed by Sun-tzu's boat analogy, an illustration so famous that it became a proverbial saying, "like the men of Wu and Yüeh in the same boat." (In the Spring and Autumn period Wu and Yüeh were bitter enemies, and Yüeh eventually extinguished Wu.) However, casting men onto fatal terrain to force their unification, the ultimate objective of any effective command, remains an artificial, desperate measure. Moreover, history is littered with examples of troops, even formidable forces, simply losing the will to fight when finding themselves in apparently hopeless situations.

The general must be unfathomable, disciplined, and awesome so as to attain the requisite obedience from his officers and troops and prevent the enemy from determining his tactics. In contrast to the modern tendency to openly discuss every scheme, strategy, and military mission, absolute secrecy must be preserved because it creates the very possibility of success. Accordingly, soldiers in Sun-tzu's time—but certainly not present-day warriors, corporate or military in America or Europe, although such remain highly visible in Japan and Korea— were kept ignorant but responsive. Questioning orders was thus beyond the realm of possibility, failing to effect them a guarantee of certain death.

Finally, certain principles of maneuver warfare—speed and swiftness, attacking where the enemy fails to defend, striking when unexpected—are scattered throughout the chapter as well as underlie it. The enemy should be manipulated and, in consonance with Sun-tzu's emphasis

upon intelligence, frustrated before they succeed in executing their plans. Victory will then be preemptively attained; the effort will be minimal, the rewards disproportionately great. Virtually all such concrete principles retain their effectiveness in most spheres, ranging from personal combat through business and life management, dependent for their application only upon the reader's insight and imagination.

12
Incendiary Attacks

SUN-TZU SAID:

"There are five types of incendiary attack: The first is to incinerate men, the second to incinerate provisions, the third to incinerate supply trains, the fourth to incinerate armories, and the fifth to incinerate formations.

"Implementing an incendiary attack depends on the proper conditions. Equipment for incendiary attack should be fully prepared before required. Launching an incendiary attack has its appropriate seasons, igniting the fire the proper days. As for the seasons, it is the time of the dry spell; as for the day, when the moon is in *chi, pi, i,* or *chen.* When it is in these four lunar lodges, these are days the wind will arise.

"In general, in incendiary warfare you must respond to the five changes of fire:

"If fires are started within their camp, then you should immediately respond with an attack from outside.

"If fires are ignited but their army remains quiet, then wait; do not attack.

"When they flare into a conflagration, if you can follow up, then do so; if you cannot, then desist.

"If the attack can be launched from outside without relying on inside assistance, initiate it at an appropriate

time.

“If fires are ignited upwind, do not attack downwind.

“Winds that arise in the daytime will persist; those that arise at night will stop.

“Now the army must know the five changes of fire in order to defend against them at the astrologically appropriate times. Thus using fire to aid an attack is enlightened, using water to assist an attack is powerful. Water can be used to sever, but cannot be employed to seize.

“Now if someone is victorious in battle and succeeds in attack but does not exploit the achievement, it is disastrous, and his fate should be termed ‘wasteful and tarrying.’ Thus it is said the wise general ponders it, the good general cultivates it.

“If it is not advantageous, do not move. If objectives cannot be attained, do not employ the army. Unless endangered do not engage in warfare. The ruler cannot mobilize the army out of personal anger. The general cannot engage in battle because of personal frustration. When it is advantageous, move; when not advantageous, stop. Anger can revert to happiness, annoyance can revert to joy, but a

vanquished state cannot be revived, the dead cannot be brought back to life.

“Thus the enlightened ruler is cautious about it, the good general respectful of it. This is the Tao for bringing security to the state and preserving the army intact.”

COMMENTARY

Incendiary attacks were much used throughout Chinese history to assault limited objectives, such as fortified towns and protected encampments, but saw less application against field armies even though flames could easily disrupt a large force moving across the dry, normally windblown northern plains. Military writers constantly warned commanders to position themselves upwind and avoid heavily vegetated terrain, conversely advocating their exploitation to launch incendiary attacks whenever enemies encamp or establish fortified positions in deliberate ignorance of them. (The Warring States text known as the Six Secret Teachings accordingly devotes a chapter to the methods for mounting incendiary defenses, including lighting backfires and preparing burned-over sections of terrain before encamping.) Suntzu’s chapter outlines the essentials for incendiary attacks, no doubt on the understanding that fire, being highly aggressive and nearly impossible to extinguish once sufficiently vigorous, proves immensely disruptive as well as destructive, thereby creating the conditions for effective attacks. Incendiary attacks may thus also be conceived metaphorically, not just limited to actual combustion or arson, but understood abstractly as characterizing any volatile threat—apart from chemical or germ warfare—that may spread insidiously, such as rumor and innuendo. Broadly construed, incendiary attacks encompass anything that sows fire and discord

within the enemy's camp, resulting in combustion (whether physical or abstract) and the need to mount urgent, massive efforts to contain and extinguish. While hardly to be advocated, everyone should be aware of their nature and potential in order to consciously contemplate possible defensive measures.

The chapter concludes with two important paragraphs, much cited in military writings and political discussions thereafter. The next to last paragraph emphasizes the importance of immediately exploiting every victory; otherwise the enemy may regroup and hard-won gains will be lost. In short, when you obtain an advantage, through conquest or otherwise, it should be relentlessly pursued, thereby wresting the ultimate objective—victory—at minimum cost. The last paragraph then reiterates the *Art of War*'s opening theme that warfare is a great affair, one that should be undertaken only after careful analytical pondering, augmented with a cautionary admonition that it should not be initiated out of a desire to avenge insults, anger, or other shortsighted emotional causes. While equally important today, whether for national policy or personal behavior, throughout history his advice has rarely been heeded.

13
Employing Spies

SUN-TZU SAID:

Sun- “When you send forth an army of a hundred thousand on a campaign, marching them out a thousand kilometers, the expenditures of the common people and the contributions of the feudal house will be one thousand pieces of gold per day. Those inconvenienced and troubled both within and without the border, who are exhausted on the road or unable to pursue their agricultural work, will be seven hundred thousand families.

“Armies remain locked in a standoff for years to fight for victory on a single day, yet generals begrudge bestowing ranks and emoluments of one hundred pieces of gold and therefore do not know the enemy’s situation. This is the ultimate inhumanity. Such a person is not a general for the people, an assistant for a ruler, or the arbiter of victory.

“The means by which enlightened rulers and sagacious generals moved and conquered others, that their achievements surpassed the masses, was advance knowledge.

“Advance knowledge cannot be gained from ghosts and spirits, inferred from phenomena, or projected from the measures of Heaven, but must be gained from men for it is the knowledge of the enemy’s true situation.

“Thus there are five types of spies to be employed: local spy, internal spy, turned spy or double agent, dead or expendable spy, and the living spy. When all five are employed together and no one knows their Tao, this is termed ‘spiritual methodology.’ They are a ruler’s treasures.

“Local spies—employ people from the local district.

“Internal spies—employ their people who hold government positions.

“Double agents—employ the enemy’s spies.

“Expendable spies—are employed to spread disinformation outside the state. Provide our expendable spies with false information and have them leak it to enemy agents.

“Living spies—return with their reports.

“Thus of all the Three Armies’ affairs no relationship is closer than with spies; no rewards are more generous than those given to spies, no affairs are more secret than those pertaining to spies.

—, —, —.

“Unless someone has the wisdom of a Sage, he cannot use spies; unless he is benevolent and righteous, he cannot employ spies; unless he is subtle and perspicacious, he cannot perceive the substance in intelligence reports. It is subtle, subtle! There are no areas in which one does not employ spies.

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“If before the mission has begun it has already been exposed, the spy and those he informed should all be put to death.

—, —, —.

“In general, as for the armies you want to strike, the cities you want to attack, and the men you want to assassinate, you must first know the names of the defensive commander, his assistants, staff, door guards, and attendants. You must have our spies search out and learn them all.

“You must search for enemy agents who have come to spy on us. Tempt them with profits, instruct and retain them. Thus double agents can be obtained and employed. Through knowledge gained from them, you can recruit both local and internal spies. Through knowledge gained from them, the expendable spy can spread his falsehoods, can be used to misinform the enemy. Through knowledge gained from them, our living spies can be employed as times require.

“The ruler must know these five aspects of espionage work. This knowledge inevitably depends on turned spies; therefore, you must be generous to double agents.

“In antiquity, when the Yin arose, they had Yi Chih in the Hsia. When the Chou arose, they had Lü Ya in the Yin. Thus enlightened rulers and sagacious generals who are able to get intelligent spies will invariably attain great achievements. This is the essence of the military, what the Three Armies rely on to move.”

COMMENTARY

This chapter, which comprises the earliest known manual or treatise on covert intelligence gathering, identifies five major categories of spies and provides a humanitarian justification for their employment. Within the context of the vast commitments and expenditures required by warfare, Sun-tzu believed that wasting material or lives, even if subsequently proven to be inconsequential, would be both stupid and inhumane because the ultimate intent of warfare should be to preserve one's own people while rapidly vanquishing the enemy. Thus, failing to gather any information that might facilitate attaining victory can only be considered perverse. However, moral purists in China over the centuries condemned the book for its breaches of sincerity, righteousness, and trust, just as did the first Westerners who eventually translated the text into French and later English. Non-military Western readers, being particularly appalled by the boldness of Sun-tzu's assertions, irrespective of their own covert traditions and widespread practices condemned the Art of War from a doctrinaire Christian perspective as a heathen work somehow typical of an inferior race. However, in the present era of increasing political complexity, shrinking defense budgets, and proliferating availability of deadly weapons throughout the world, perhaps Sun-tzu's essential message should be heeded rather than ignored.

Apart from discussing the types of spies, and in particular the importance of the double agent, the chapter identifies two critical points: controlling agents requires talent and character, while interpreting the data acquired requires

wisdom and perspicacity. Moreover, a certain degree of ruthless determination is required to deliberately sacrifice agents in the cause of righteousness. Subsequent military writings, although stressing the need for their activities, rarely discuss the spy's actual work and nature, emphasizing instead the critical role of military intelligence for accurately evaluating the enemy and formulating battlefield plans.

"Employing Spies" also contains a statement erroneously over-emphasized by Western commentators unfamiliar with China's military history: "Advance knowledge cannot be gained from ghosts and spirits, inferred from phenomena, or projected from the measures of Heaven, but must be gained from men for it is the knowledge of the enemy's true situation."

Even though the classic military writings stressed human effort and denied the value of divination in fathoming the outcome of campaigns and battles, the prognosticatory tradition that originated in the Shang dynasty not only continued to flourish, but vigorously evolved to encompass the interpretation of such diverse phenomena as sounds, clouds, weather, phases of the moon, natural omens, and the numerology of dates. Commanders might exhort their men to ignore meteors, birds flying backwards, and the sudden appearance of dense black clouds, but rulers and generals still turned to nonhuman agencies in an attempt to predict favorable courses of action amidst the confusion of military confrontations.

14
Nine Configurations and Two Questions
(Passages from the T'ung Tien)

THE KING OF WU ASKED SUN-TZU:

"On 'dispersive terrain,' the officers and troops are thinking of their families. As we cannot engage in battle with them, we must solidly defend our positions and not go forth. If the enemy attacks our small cities; plunders our fields; prevents us from gathering firewood; blocks our major roads; and awaits our emptiness and depletion to urgently advance and attack, what should we do?"

Sun-tzu replied: "When the enemy has deeply penetrated our capital region, putting numerous fortifications and cities behind them, their officers and men regard the army as their family, are focused in their intentions, and lightly enter into battle. On the contrary our troops are in their native state; they feel secure on their territory and embrace life. Therefore in battle formation they are not firm, when they engage in battle they are not victorious. We should assemble the people and gather the masses; collect the foodstuffs, livestock, and cloth; defend the walled cities and prepare to defend the passes; and dispatch light troops to sever their supply routes. If they are not able to provoke us into battle; their provisions fail to arrive; and there's nothing in the countryside that they can plunder, their Three Armies will be in difficulty. Take advantage of the situation to entice them, and then we can be successful.

"If we want to engage in battle in the countryside we must rely upon the strategic configuration of power. Utilize ravines to establish ambushes. Lacking ravines, we must

conceal ourselves in the weather, darkness, dusk, and fog, going forth where they will not expect it, suddenly striking their indolent forces. Then we will achieve results."

The king of Wu asked Sun-tzu: "Suppose we have reached 'light terrain' and have just entered the enemy's borders. Our officers and men are thinking of turning back. It's hard to advance, but easy to withdraw. We do not yet have ravines and defiles behind us, and the Three Armies are fearful. The commanding general wants to advance, the officers and troops want to retreat, so above and below are of different minds. The enemy is defending his walled cities and fortifications, putting his chariots and cavalry in good order. Some occupy positions to our fore, others strike to our rear. What should we do?"

Sun-tzu replied: "When we have reached 'light terrain' the officers and men are not yet focused because their task is entering the border, not waging battle. Do not approach his famous cities nor traverse his major roads. Feign doubt, pretend confusion. Show him that we are about to depart. Then initially select elite cavalry to silently enter their territory and plunder their cattle, horses, and other domestic animals. When the Three Armies observe that they were able to advance they will not be afraid. Divide our superior soldiers and have them secretly prepare ambushes. Should the enemy come up, strike without hesitation; if they do not come up, then abandon the ambushes and depart."

He also said: "Suppose the army has entered the enemy's borders. The enemy solidifies his fortifications without engaging in battle. Our officers and troops are thinking of returning home, but even if we want to retreat it would also be difficult. This is referred to as 'light terrain.' We should select elite cavalry to establish ambushes on the strategic roads. When we withdraw the enemy will pursue us;

when they come up, strike them.”

The king of Wu asked Sun-tzu: “On ‘contentious terrain’ suppose the enemy arrives first, occupies the strategic positions and holds the advantageous ones with selected troops and well-trained soldiers.

Some of them go forth, others assume defensive positions, thereby being prepared against our unorthodox tactics. What should we do?” Sun-tzu replied: “The rule for fighting on ‘contentious terrain’ is that one who yields will gain, while one who fights will lose. If the enemy has gained a position, then be careful not to attack it. Draw him away by pretending to go off. Set up flags, beat the drums, and move swiftly toward what he loves. Drag wood to raise clouds of dust, to befuddle his ears and eyes. Divide up our superior troops, secretly placing them in ambush. The enemy will certainly come forth to rescue the endangered target. What others want we will give them; what they abandon we will take. That is the Tao to fight for land they occupy first.

“If we arrive first and the enemy uses this strategy, then select fierce troops to solidly defend our position. Have our light troops pursue the enemy’s feigned departure, splitting some off to set up ambushes in the ravines and defiles. If the enemy turns about to fight, the troops in ambush on the flanks should rise up. This is the Tao to achieve complete victory.”

The king of Wu asked Sun-tzu: “If on ‘traversable terrain’ where movement is easy we are about to isolate the enemy and we want to ensure he cannot advance, we must order our cities along the border to improve their defensive

preparations, thoroughly sever all open roads, and secure the blockades at the passes. Suppose we have not planned for it beforehand, while the enemy has already made such preparations. They will be able to advance, but we will not be able to go forth. If our numbers are moreover equal, what then?”

Sun-tzu replied: “Since we cannot go forth but they can come up, we should split off some troops and conceal them. Our defenders should appear at ease and lax. Display incapability, and the enemy will definitely arrive. Establish ambushes, conceal ourselves in the grass, and go forth where he doesn’t expect it. Then we can be successful.”

The king of Wu asked Sun-tzu: “On ‘focal terrain’ one values being first. If the road is far and we mobilize after the enemy, even though we race our chariots and gallop our horses we will not be able to arrive first. What then?”

Sun-tzu replied: “Focal terrain is territory bordered by three states with roads open in the four directions. If we and the enemy oppose each other, while on the side there are other states, then one who would be referred to as ‘first’ must dispatch polite emissaries with generous gifts, to make alliances with the neighboring states. Establish friendly relations with them and secure their favor. Then even though our troops arrive after the enemy, the masses of the region will already be allied with us. With picked soldiers and welltrained troops they will block the advantageous positions and occupy them. They will sustain our military affairs and make our provisions substantial. Order our chariots and cavalry to go in and out with an attitude of respectful anticipation. We will have the support of the masses, while the enemy will have lost its partisans. The armies of the feudal states, like the horns of an ox, thundering the drums will attack en masse. The enemy will

be startled and terrified, and no one will know what they ought to do."

The king of Wu asked Sun-tzu: "Suppose we have led the troops deep into 'heavy terrain,' bypassing a great many places so our supply routes are cut off or blocked. Suppose we want to return home but cannot get past their strategic configuration of power. If we want to forage on the enemy's land and maintain our troops without loss, then what should we do?"

Sun-tzu replied: "Whenever we remain on heavy terrain the officers and troops will readily be courageous. If the supply routes are no longer open, then we must plunder to extend our provisions. Whatever the lower ranks obtain in grain or cloth must all be forwarded to the top, and those that collect the most will be rewarded. The warriors will no longer think about returning home.

"If you want to turn about and go forth, urgently make defensive preparations. Deepen the moats and raise the ramparts, showing the enemy our determination to remain indefinitely. The enemy will suspect we have an open route somewhere, and will remove themselves from the critical roads. Then we can order our light chariots to sally forth silently, the dust flying up, using the cattle and horses as bait. If the enemy goes forth, beat the drums and follow him. Prior to this secretly conceal some warriors in ambush, setting the time with them so that our forces within and without can launch a coordinated attack. The enemy's defeat can then be known."

The king of Wu asked Sun-tzu: "Suppose we enter 'entrapping terrain'— mountains, rivers, ravines, and

defiles. The road is difficult to follow; we have been on the move for a long time and the troops are tired. The enemy lies before us, and is ambushing our rear. His encampment occupies a position to the left, while they defend against our right. His superior chariots and skilled cavalry are pressing us on a constricted road. What then?”

Sun-tzu replied: “First have the light chariots advance about ten kilometers so that they and the enemy are observing each other. When our main army has reached their ravines and defiles, deploy some to go to the left, others to the right, while the commanding gen- eral conducts observations in all directions. Select vacuities and seize them, then have all our forces converge together on the road, stopping only when tired.”

The king of Wu asked Sun-tzu: “Suppose we have entered ‘encircled terrain,’ so that before us there is a strong enemy, and to our rear precipitous and difficult ground. The enemy has severed our supply lines, and is taking advantage of our moving disposition. If they beat their drums and yell but do not advance—in order to observe our capability—what should we do?”

Sun-tzu replied: “On ‘encircled terrain’ it is appropriate to block up all the openings, showing the troops that there is no place to go. Then they will regard the army as their family; the multitude will be of one mind; and the strength of the Three Armies will be united. Furthermore, steam food for several days, not displaying any fire or smoke, thus creating the appearance of decay, confusion, paucity of numbers, and weakness. When the enemy sees us their battle preparations will certainly be light.

“Exhort and incite our officers and troops, cause their anger to be aroused. Assume formation, deploying our superior troops in ambush in the ravines and defiles to the left and right. Beat the drums and go forth. If the enemy

opposes us, fervently strike them, concentrating on breaking through. Fight in the front, consolidate in the rear, and set flanks out to the left and right.”

The king of Wu again asked: “Suppose the enemy is surrounded by our forces. They lie in ambush and make deep plans. They display enticements to us, they tire us with their pennants, moving all about as if in confusion. We do not know how to deal with this. What should we do?”

Sun-tzu replied: “Have a thousand men take up pennants, divide up, and block off the strategic roads. Have our light troops advance and try to provoke the enemy. Deploy our battle arrays but do not press them. Intercept them, but do not go off. This is the art of defeating stratagems.”

The king of Wu asked Sun-tzu: “Suppose our army has gone out beyond the borders, and our forces are arrayed in front of the enemy. The enemy’s forces arrive in great number, encircling us several layers deep. We want to suddenly burst out but all four sides are blocked. If we want to encourage our officers and incite our masses of troops, have them risk their lives and crush the encirclement, then how should we do it?”

Sun-tzu replied: “Make the moats deeper and the ramparts higher, showing that we are making preparations to defend our position. Be

quiet and still, without moving, to conceal our capability. Announce orders to the Three Armies to feign hopelessness. Kill your cattle and burn the supply wagons to feast our warriors. Completely burn all provisions, fill in the wells, level the stoves, cut off your hair, cast aside your caps,

completely eliminate all thoughts of life, have no further plans. When the officers are determined to die, then have them polish their armor and sharpen their blades. When their *ch'i* has been united and their strength as one, some should attack the two flanks, thundering the drums and yelling fervently. The enemy will also become frightened, and no one will know how to withstand us. Elite troops and detached units should urgently attack their rear. This is the Tao by which to lose the road and seek life. Thus it is said that 'one who is in difficulty but doesn't make plans is impoverished; one who is impoverished and doesn't fight is lost.'"

COMMENTARY

As discussed in the Introduction, Sun-tzu was apparently the first military theorist to contemplate the characteristics of terrain and systematically develop principles for coping with difficulties and general situations. However, while his analysis was focused upon combat and his principles are conceived in terms of military capabilities, his configurations provide abstract mappings that may be employed for numerous scenarios and need not even be limited to competitive situations, but simply life environments. For example, "suspended terrain" is constantly encountered because it marks a situation where intrepidly rushing forward must prove successful for it will become impossible to retreat, to salvage or concoct some form of defensive role or excusable backstepping. On expansive terrain—any broad, open environment—freedom of movement is accorded all forces,

including one's competitors. Therefore, flexibility becomes possible, but constricting the enemy, converting them into a confined target, may prove unattainable,

requiring the application of overwhelming force, as Sun-tzu advises, to achieve success. Certainly new marketing thrusts, business developments, even personal development can flourish in a open, unrestricted environment, although so may everyone else.

The chapter's second major topic focuses upon weakness and failures in command and control, including imbalances in authority and the disintegration of unity. Without a unified command, without discipline and a proper sense of duty, armies and any other strictly hierarchical organizations are doomed to failure. However, as already advised in the previous chapter, the commander needs to secure the troops' emotional allegiance, view them like his sons, but yet balance that benevolent treatment with appropriate punitive and disciplinary measures. Otherwise, they will become unruly and intractable to command.

The last paragraph, one of the most famous in Chinese military literature, is essentially an admonition to know yourself and your enemy before engaging in battle. Apparently per-

The king of Wu also asked: "What if we surround the enemy?"

Sun Wu replied: "Mountain peaks and valley confines that are difficult to traverse are referred to as the 'means to impoverish invaders.' The method for attacking them is to set our troops in ambush in dark and concealed places. Open a road for the enemy to depart, show them a path for flight. When they are seeking life and escaping from death they certainly won't have any will to fight. Then we can strike them; even if they are numerous they will certainly be destroyed."

The *Art of War* also states: "If the enemy is on 'fatal terrain,' the *ch'i* of his officers and troops will be courageous. If we want to strike him the strategy is to

seemingly accord with him and not resist. Secretly guard against his advantageous positions. Sever his supply routes. If you are afraid that he has unorthodox troops concealed that have not been observed, have our bowmen and crossbowmen guard against his positions."

The king of Wu asked Sun-tzu: "The enemy is courageous and unafraid, arrogant and reckless. His soldiers are numerous and strong. What should we do?"

Sun-tzu said: "Speak and act submissively in order to accord with their intentions. Do not cause them to comprehend the situation, and thereby increase their indolence. In accord with the enemy's shifts and changes, submerge our forces in ambush to await the moment. Then do not look at their forward motion, nor look back to their rearward movement, but strike them in the middle. Even though they are numerous, they can be taken. The Tao for attacking the arrogant is to not engage their advance front."

Sun Pin
Military Methods

Translation and Commentary

孫臏兵法

1
Capture of P’ang Chüan

FORMERLY KING HUI, LORD of Liang, being about to attack Formerly Chao’s capital of Han-tan, had General of the Army P’ang Chüan lead eighty thousand mailed troops to Ch’ih-ch’iu. King Wei, Lord of Ch’i, hearing about it, had General of the Army T’ien Chi lead eighty thousand mailed troops to a position on their border.

P’ang Chüan attacked Wey’s capital city. General of the Army T’ien Chi addressed Sun Pin: “P’ang Chüan has taken Wey’s capital. Should we rescue them or not?”

Sun Pin replied: “We should not.”

T’ien Chi said: “If we do not rescue Wey, what should we do?”

Sun Pin said: “I suggest that we go south to attack P’ing-ling. The town of P’ing-ling is small but the district is large; the population is numerous; and its mailed soldiers abundant. It is a military town in Wei’s Tung-yang region, difficult to attack. We would thereby display something dubious to them. When we attack P’ing-ling, Sung will be to the south, Wey to the north, and Shih-ch’iu will lie along our route. Accordingly, since our supply route will be cut off, we will show them we do not understand military affairs.” Thereupon they broke camp and rushed to P’ing-ling.

Approaching P’ing-ling, T’ien Chi summoned Sun Pin and asked: “How will you manage this affair?”

Sun Pin said: “Among the high officials of our nearby border cities, which ones do not understand military affairs?”

T’ien Chi said: “The high officials of Ch’i-cheng and Kao-t’ang.” Sun Pin said: “I suggest that we take the place where Wei’s supplies are stored. To attempt this our two commanders will have to pass by Wei’s cities of Heng and Chüan. The area is crossed by regional roads in all directions, and is one where the cities of Heng and Chüan can easily deploy their attached forces. Their wide roads are already occupied by chariots and soldiers. If our vanguard remains stalwart, and our main force remains intact, Wei’s forces will move along the roads to attack and destroy the rear of our two detached forces and our two commanders will be killed.”

Thereupon T’ien Chi segmented the forces attached to Ch’i-cheng and Kao-t’ang into two, and had them launch a flurried assault on P’ing-ling. Wei’s forces from Heng and Chüan came forth along the regional roads in a continuous wave to mount a pincer attack upon their rear. The two high officials from Ch’i-cheng and Kao-t’ang fell prey to these tactics and were severely defeated.

General T’ien Chi summoned Sun Pin and inquired: “As planned, we unsuccessfully attacked and lost our forces from Ch’i-cheng and Kao-t’ang, which fell prey to our tactics and were defeated. How will affairs now be managed?”

Sun Pin said: “I suggest that you dispatch light chariots to the west, having them race to the suburbs of Liang in order to infuriate them. Divide up our troops and only dispatch a portion to immediately follow them, to show that we are few.”

Thereupon T’ien Chi did it. As expected P’ang Chüan abandoned his supply wagons and arrived after a forced march at double pace.

Without allowing P’ang Chüan’s army any rest, Sun Pin attacked and captured him at Kuei-ling. Thus it is said that Sun Pin fully realized the Tao of the military.

COMMENTARY

The battle account found here differs somewhat from that preserved in Sun Pin's *Shih Chi* biography translated in the Introduction because it surprisingly focuses on Wei's attack on the minor state of Wey, ignoring the main assault on Han-tan that presumably precipitated Chao's request for aid. If taken in isolation, it would indicate that Ch'i's rescue operation was directed toward releasing the pressure on Wey rather than on Chao's capital of Han-tan. However, since numerous historical sources record the assault on the latter, Wei's strike into Wey probably constituted a preliminary action to secure the corridor of approach.

Sun Pin's tactical methods are clearly revealed by these battle accounts: display incapability, even at the expense of deliberately sacrificing some units; destabilize the enemy, compelling them into motion by threatening what they value; and then employ well-entrenched troops to exploit the resulting haste and disorder to wrest an easy victory, thereby proving Sun-tzu's dictum that "those who excel in warfare conquer those that are easy to conquer." This sequence, although rooted in historical actuality, provides a succinct methodology, equally applicable to all competitive situations.

2
Audience with King Wei

SUN PIN , IN HIS AUDIENCE WITH KING WEI , SAID :

“Now the military does not rely on an unvarying strategic configuration of power. This is the Tao transmitted from the Former Kings. Victory in warfare is the means by which to preserve vanquished states and continue severed generations. Not being victorious in warfare is the means by which to diminish territory and endanger the altars of state. For this reason military affairs cannot but be investigated. Yet one who takes pleasure in the military will perish, and one who finds profit in victory will be insulted. The military is not something to take pleasure in, victory not something through which to profit.

“Move only after all affairs have been prepared. Thus one whose walled city is small but defense solid has accumulated resources. One whose troops are few but army is strong has righteousness. Now mounting a defense without anything to rely upon, or engaging in battle without righteousness, no one under Heaven would be able to be solid and strong.

“At the time when Yao possessed All under Heaven there were seven tribes who dishonored the king’s edicts and did not put them into effect. There were the two Yi in the east, and four in the central states. It was not possible for Yao to be at ease and attain the profit of governing All under

Heaven. He was victorious in battle and his strength was established; therefore, All under Heaven submitted.

"In antiquity Shen Nung did battle with the Fu and Sui; the Yellow Emperor did battle with Ch'ih Yu at Shu-lü; Yao attacked Kung Kung; Shun attacked Ch'e and drove off the Three Miao; T'ang deposed Chieh; King Wu attacked Chou; and the Duke of Chou obliterated the remnant state of Shang-yen when it rebelled.

"Thus if someone's virtue is not like that of the Five Emperors; his ability does not reach that of the Three Kings; nor his wisdom match that of the Duke of Chou—and yet he says, 'I want to accumulate benevolence and righteousness, practice the rites and music, and wear flowing robes and thereby prevent conflict and seizure'—it is not that Yao and Shun did not want this, but they could not attain it.

Therefore they mobilized the military to constrain the evil."

COMMENTARY

This chapter, the first substantive one on tactics, opens as does the *Art of War* with a statement emphasizing the critical, life-and-death nature of warfare. Sun-tzu had previously said: "Warfare is the greatest affair of state, the basis of life and death, the Tao to survival or extinction. It must be thoroughly pondered and analyzed." The initial paragraph similarly summarizes Sun Pin's attitude toward military affairs: insofar as evil or threats to one's security remain in the world, the military and warfare are both necessary and unavoidable. The state's very survival depends upon understanding the principles of warfare, undertaking military preparations, and acting when necessary with commitment and resolve. From a more humanitarian perspective, military forces provide the only

means to eradicate the great scourges of mankind, to act on behalf of others to eliminate evil and repression, just as Ch'i (in a very self-interested manner) did in rescuing Chao and Han from Wei's forces. In this regard Sun Pin's sentiments generally accord with the thoughts of other military writers in the Warring States period, allowing for sometimes significant variations in perspective.

The chapter's main thrust is justified by citing the historical character and inevitability of weapons and warfare, a theme reiterated in chapter nine where Sun Pin stresses that warfare is inherent to mankind. When the evil encroached upon the good, and especially upon the Sage rules of antiquity, it was painfully discovered that only force could constrain them. Consequently even such great paragons of Virtue as Yao and Shun were compelled to create weapons and evolve tactics as they mounted military actions to extirpate the evil. Sun Pin cites numerous examples of these ancient, semi-legendary conflicts among tribes and totems to support his argument and thus directly contradicts the Confucians led by the able but pedantic Mencius who vociferously claimed that antiquity was an ideal period when Virtue alone held sway over civilization, and rulers cultivated such pristine purity that even incorrigibles were shamed into submissive obedience. As Sun Pin pointedly concludes, Yao and Shun wished to govern with benevolence and righteousness, but it simply proved inadequate to the daunting task of contending with force and brutality, just as it does at all levels of government today.

At the same time Sun Pin, as Sun-tzu and many other military writers, equally warns against the danger of becoming enthralled with warfare, of being seduced by the apparent profits and thereby dooming the state to extinction. Although he only explicitly raises it once more, the belief that frequent battles debilitate a state and even numerous victories can lead to ruin clearly underlies the entire *Military Methods.*

Apart from being physically prepared, the soldiers must embrace a moral cause, must fight out of and for righteousness. Only those properly motivated by virtue (in addition to the immediate stimulus of rewards and fear of punishments) prove committed and effective in combat. Although he does not again mention the importance of righteousness for the troops, Sun Pin does stress the need for it in the commander, and further asserts that individual warriors will fail to qualify for chariot assignment if they lack a constellation of virtues. Even today, righteousness remains a strong motivator, capable of arousing fervor when dramatically proclaimed by a skilled speaker, inciting men to action not only for moral causes, but also hatred, nationalism, and bigotry clothed in its garb. The wise can still avail of its power, whether in the search for companions and associates in the Tao or to brace themselves for daily struggles.

3
The Questions of King Wei

威王問

KING WEI OF CH'I , inquiring about employing the military, said to Sun Pin: "If two armies confront each other, their two generals looking across at each other, with both of them being solid and secure so that neither side dares to move first, what should be done?"

Sun Pin replied: "Employ some light troops to test them, commanded by some lowly but courageous officer. Focus on fleeing, do not strive for victory. Deploy your forces in concealment in order to abruptly assault their flanks. This is termed the 'Great Attainment.'"

King Wei asked: "Is there a method for employing the many and the few?"

Sun Pin said, "There is."

King Wei said: "If we are strong while the enemy is weak, if we are numerous while the enemy is few, how should we employ them?"

Sun Pin bowed twice and said: "This is the question of an enlightened King! To be numerous and moreover strong, yet still inquire about employing them is the Tao for making the

state secure. The method is called ‘Inducing the Army.’ Disrupt your companies and disorder your ranks, in order to seemingly accord with the enemy’s desires. Then the enemy will certainly engage you in battle.”

King Wei asked: “If the enemy is numerous while we are few, if the enemy is strong while we are weak, how should we employ them?” Sun Pin said: “The strategy is termed ‘Yielding to Awesomeness.’ You must conceal the army’s tail to ensure that the army will be able to withdraw. Long weapons should be in front, short ones to the rear. Establish roving crossbow units in order to provide support in exigencies. Your main force should not move in order to wait for the enemy to manifest their capabilities.”

King Wei said: “Suppose we go forth and the enemy comes forth. We still do not know whether they are many or few. How should we employ the army?”

Sun Pin said: “The method is called ‘Dangerous Completion.’ If the enemy is well ordered, deploy into three formations. One should confront the enemy, two can provide mutual assistance. When they can halt they should halt; when they can move, they should move. Do not seek a quick victory.”

King Wei asked: “How do we attack exhausted invaders?”

Sun Pin said: “You can make plans while waiting for them to find a route to life.”

King Wei asked: “How do we attack someone of equal strength?”

Sun Pin said: “Confuse them so that they disperse their forces, then unite our troops and strike them, do not let the enemy know about it. But if they do not disperse, secure your position and halt. Do not attack in any situation that appears suspicious.”

King Wei said: “Is there a Tao for one to attack ten?”

Sun Pin said: “There is. ‘Attack where they are unprepared, go forth where they will not expect it.’”

King Wei said: “If the ground is level and the troops well ordered, but after engaging in battle they retreat, what does it mean?”

Sun Pin said: “It means that the deployment lacked a front.”

King Wei said: “How can we cause the people to always listen to orders?”

Sun Pin said: “Always be sincere.”

King Wei said, “Good. In discussing the army’s strategic power you are inexhaustible.”

T’ien Chi asked Sun Pin: “What causes trouble for the army? What causes difficulty for the enemy? How is it that walls and entrenchments are not taken? How does one lose the advantages of Heaven? How does one lose the advantages of Earth? How does one lose the people? I would like to ask if there is a Tao for these six?”

Sun Pin said: “There is. What causes trouble for the army is the terrain. What causes difficulty for the enemy is ravines. Thus it is said that three kilometers of wetlands will

cause trouble for the army; crossing through such wetlands will result in leaving the main force behind. Thus it is said, ‘what causes trouble for the army is terrain, what causes trouble for the enemy is ravines.’ If the walls and entrenchments are not taken it is because of defensive ditches and defiles.”

T’ien Chi asked: “If we encounter a heavily ensconced force, what then?”

Sun Pin said: “Drum the advance and press them, employ ten ways to draw them out.”

T’ien Chi said: “When their deployment has already been determined, how can we cause the soldiers to invariably obey?”

Sun Pin said: “Be severe and show them the potential profits.”

T’ien Chi said: “Are not rewards and punishments the most urgent matters for the military?”

Sun Pin said: “They are not. Now rewards are the means by which to give happiness to the masses and cause soldiers to forget death. Punishments are the means by which to rectify the chaotic and cause the people to fear their superiors. They can be employed to facilitate victory, but they are not urgent matters.”

T’ien Chi said: “Are authority, strategic power, plans, and deception urgent matters for the military?”

Sun Pin said: “They are not. Now authority is the means by which to assemble the masses. Strategic power is the

means by which to cause the soldiers to invariably fight. Plans are the means by which to cause the enemy to be unprepared. Deception is the means by which to put the enemy into difficulty. They can be employed to facilitate victory, but they are not urgent affairs."

T'ien Chi angrily flushed: "These six are all employed by those who excel in military affairs, and yet you, sir, say they are not urgent. Then what matters are urgent?"

Sun Pin said: "Evaluating the enemy, estimating the difficulties of terrain, invariably investigating both near and far is the Tao of the general. Invariably attacking where they do not defend, this is the army's urgency. Rewards and punishments are the bones."

T'ien Chi asked Sun Pin: "Is there a Tao for deploying the army and not engaging in battle?"

Sun Pin said: "There is. Amass your troops in the ravines and increase the height of your fortifications, being silently alert without moving. You must not be greedy, you must not get angry."

T'ien Chi said: "If the enemy is numerous and martial but we must fight, is there a Tao?"

Sun Pin said: "There is. Augment your fortifications and expand your soldiers' determination. Strictly order and unify the masses. Avoid the enemy and make him arrogant. Inveigle and tire him. 'Attack where he is not prepared, go forth where he will not expect it.' You must be prepared to continue such actions for a long time."

T'ien Chi asked Sun Pin: "What about the Awl Formation? What about the Wild Geese Formation? How does one select the troops and strong officers? How about the strong crossbowmen running along and firing? What about the Fierce Wind Formation? What about the masses of troops?"

Sun Pin said: “The Awl Formation is the means by which to penetrate solid formations and destroy elite units. The Wild Geese Formation is the means by which to abruptly assault the enemy’s flanks and respond to changes. Selecting the troops and strong officers is the means by which to break through enemy formations and capture their generals. Strong crossbowmen running along and firing are the means by which to take pleasure in battle and sustain it. The Fierce Wind Formation is the means by which to return from fierce engagements. Masses of troops are used to divide the effort and achieve victory. However, enlightened rulers and knowledgeable generals do not rely on masses of troops to seek success.”

Sun Pin went out and his disciples asked him: “What were the questions of King Wei and T’ien Chi, minister and ruler, like?”

Sun Pin said: “King Wei asked nine questions, T’ien Chi asked seven. They are very close to knowing all about military affairs, but have not yet penetrated the Tao. I have heard that those who are always sincere flourish; those who establish righteousness employ military force; those without adequate preparation suffer injury; and those who exhaust their troops perish. In three generations Ch’i will be troubled.”

Fragments

“If one excels then the army will prepare for him.”

“If you are double the enemy, halt and do not move, be full and await them.”

“One who is not prepared will suffer difficulty from the terrain.”

COMMENTARY

This chapter purportedly records Sun Pin's discussion of the crux of military affairs with King Wei and T'ien Chi, the king's famous commanding general. They pose a total of sixteen theoretical battlefield situations for which Sun Pin suggests appropriate tactical principles. Their dialogue thus participates in the growing tradition of the early military writings that probably commenced with a few laconic sentences in the *Ssu-ma Fa* of analyzing common confrontational situations. Sun-tzu's *Art of War* offered a number of abstract general principles for conceptualizing and managing battlefield circumstances, while Wu Ch'i, who was active a generation earlier than Sun Pin, described numerous tactical situations, analyzed their inherently significant factors, and correlated them with tactical measures.

Sun-tzu, who tended to conceive of these prototypical situations largely in terms of configurations of terrain, had still been encumbered with directing forces based upon chariots constituting the main battle element. By Wu Ch'i's time the infantry had become far more significant as a result of the expanding scope of battle. Sun Pin thus lived at a time when mobility and flexibility were being increasingly realized, when logistics and the imposition of new forms of organization easily allowed fielding armies of eighty thousand men or more as already seen in the first chapter describing the battles between Wei and Ch'i. Thereafter the *Six Secret Teachings,* which was probably composed within a century of the *Military Methods,* advanced extensive tactical analyses targeted to commonly confronted battlefield conditions. Many of the theoretical cases reprised

here are found in two or three of these books, although the responses vary.

Sun Pin's replies are all brief, no doubt simply summarized in common with other works of the period, and generally emphasize themes earlier expressed by Sun-tzu: mobility; creating opportunities by manipulating the enemy; segmenting and reuniting to concentrate at appropriate points; and attacking where the enemy is unprepared, where they have not mounted an adequate defense or expect a strike. Some commentators detect great advances in Sun Pin's thought, with a significant stress on aggressive action, but the chapter is more balanced than at first appears, and certain defensive measures, as well as manipulating the enemy, are advocated.

4
T’ien Chi Inquires About Fortifications

T’IEN CHI ASKED SUN PIN:

T’ien “If our troops, being few, unexpectedly encounter an enemy, what tactics should we employ?”

Sun Pin said: “Order our crossbowmen to rapidly deploy and spread out our other bowmen.”

T’ien Chi said: “When we are in the field, our troops always improve their positions and establish temporary fortifications. How should this be done?”

Sun Pin said: “This, general, is an enlightened question, for these are things that people overlook or rarely find urgent. They are the means for hastily erecting field defenses and raising the troops’ determination.”

T’ien Chi said: “May I hear about them?”

Sun Pin said: “You may. By employing these measures you can respond to sudden distress, occupy defiles and passes, and survive in the midst of fatal terrain. This is the way I took P’ang Chüan and captured Imperial Prince Shen.”

T’ien Chi said: “Excellent. The affair is long past but the tactics are still not apparent.”

Sun Pin said: “Caltraps are employed as ditches and moats. Chariots are employed as fortifications. The protective enclosures on the chariots are employed as

parapets. Shields are employed as battlements. The long weapons are placed next in order to remedy any breakthrough. The short spears are placed inside them in order to support the long weapons. The other short weapons follow in turn in order to make it difficult for the enemy to withdraw and to take advantage of the enemy's weaknesses. Crossbows are placed behind them to act as trebuchets. In the middle there aren't any men, to allow for flexible response.

"Once you have determined how to deploy your troops, establish detailed tactics for the engagement. The *Ordinances* state: 'Place the crossbows behind the caltraps and fire according to a predetermined sequence only after the enemy enters the caltraps.' The top of the fortifications should be manned by equal numbers of crossbows and spear-tipped halberds. The *Methods* states: 'Move only after receiving reports from the spies you dispatched.'

"Five kilometers outside your defensive lines establish lookout posts, ordering that they be within sight of each other. If you are encamped on high ground, deploy the lookouts in a square array; if you are encamped on low ground, deploy them around a circular perimeter. To signal, at night beat the drums, in the daytime raise flags."

Fragments

Sun Pin said: "Do not fail to mount a defense on account of the army's fear."

Sun Pin said: "To know beforehand whether one will be victorious or not victorious is termed 'knowing the Tao.'"

COMMENTARY

This intriguing chapter may be translated rather differently depending upon whether it is interpreted as explicating the tactics actually employed to achieve the famous massacre at Ma-ling, or as a general response to T'ien Chi's questions about fortifications. In the former case, and thus for exploiting valleys and similar terrain to establish a killing zone, these tactics— while having general applicability— were specifically implemented to ambush an enemy force. Therefore the troops had to be ensconced behind the temporary fortifications described above, but deployed in either a U-shaped or parallel array around an open area essential to the enemy's route of march rather than in a closed, square, outwardly directed defensive formation.

Whether for offensive or defensive purposes, successful fortifications invariable exploit the terrain's configuration. For example, open ground normally requires closed ramparts such as might be achieved by "circling the wagons," just as in America's frontier days. When war chariots and even supply wagons were temporarily employed as the basis for defensive "walls," the battlements and parapets were then inherently provided by the chariots' fixed walls and protective coverings, and could be quickly supplemented by the different shields carried by the soldiers. The various weapons groups, in accord with their individual characteristics, were then deployed behind the fortified chariots. In this chapter Sun Pin advises placing the long weapons (spears and halberds) right inside the chariot perimeter, no doubt because they could then thrust at any troops that survive the hail of arrows to assault the rampart itself. The shorter weapons would then be arrayed further within to counter any breakthroughs, the swordsmen and axe bearers thus essentially being held in reserve to intercept any soldiers that succeed in penetrating the outer

defenses. The interior of such a closed array would be left completely vacant, either on the generally recognized principle that open spaces are necessary to contain enemy breakthroughs, or to allow flexibility in responding to unforeseen developments or threats that might materialize in one area or another. The chapter thus describes the organizational principles for a formidable, systematized defensive array that might be quickly effected by a mobile force operating far from its home bastion, much alike the Roman practice of erecting palisades even for temporary encampments.

Naturally these organizational principles could easily be adapted to the terrain's characteristics, with temporary fortifications erected along the sides of valleys, utilizing the natural protection afforded by heights to the rear. Alternatively, the mouths of ravines, especially those fronting a valley or confined road, might be occupied by constructing ramparts across the opening. However, fatal terrain—a term made prominent by Sun-tzu—would present somewhat more difficult problems, especially if troops were caught between an advancing army and a body of water, but might be mastered with a strong, square deployment.

Abstracted for more universal application, the essential principles of mounting temporary defenses, exploiting resources at hand, and always being prepared for unexpected attacks all remain crucial to military science, business, and even personal life. The particularization and specialization of weapons groups, tactics that employ resources appropriately and in mutual support for greatest effect, also merits noting. Fortified defenses—whether physical or abstract—create localized strategic advantages that allow harried, outnumbered units to withstand stronger, more animated forces and choose the moment for engaging the enemy. Moreover, strong defensive arrays inherently embody great offensive potential. Merely by inverting the perimeter and luring the enemy into the newly created focal

zone, overwhelming attacks can also be mounted from largely impregnable, although temporary, fortifications.

5
Selecting the Troops

SUN-TZU SAID:

“For the army, victory lies in selecting the troops; courage lies in the regulations; skill lies in the strategic configuration of power; sharpness lies in trust; power lies in the Tao; wealth lies in a speedy return; strength lies in giving rest to the people; injury lies in frequent battles.”

Sun Pin said: “The implementation of Virtue is the army’s great resource. Trust is the army’s clear reward. One who detests warfare is the army’s true kingly implement. Gaining the masses is the basis for victory.”

Sun Pin said: “There are five factors to constantly being victorious. A commander who obtains the ruler’s sole authority will be victorious. One who knows the Tao will be victorious. One who has gained the masses will be victorious. One whose left and right are in harmony will be victorious. One who analyzes the enemy and estimates the terrain will be victorious.”

Sun Pin said: “There are five factors to constantly not being victorious. A general who is hampered by the ruler will not be victorious. One who does not know the Tao will not be victorious. A perverse general will not be victorious. One who does not use spies will not be victorious. One who fails to gain the masses will not be victorious.”

Sun Pin said: “Victory lies in exhausting trust, making rewards clear, selecting the troops, and taking advantage of the enemy’s weaknesses. This is referred to as King Wu’s treasure.”

Sun Pin said: “One who has not obtained the ruler’s trust does not act as his general.”

Sun Pin said: “Generals have three essential traits. The first is called trust, the second loyalty, the third daring. What loyalty? To the ruler. What trust? In rewards. What daring? To eliminate the bad. If someone is not loyal to the ruler, you cannot risk employing him in the army. One whose rewards are not trusted, the nobles will not regard as Virtuous. One who does not dare eliminate the bad will not be respected by the nobles.”

COMMENTARY

The first paragraph summarizes a number of Sun Pin’s observations on the nature of military affairs, and in particular the essence of the army. The individual principles,

which equally draw upon Sun-tzu's thoughts, are self-explanatory. However, a principle underlying the entire chapter (even though it may have been cobbled together by his disciples) is the fundamental importance of the people.

Warfare in this period imposed increasingly greater burdens on the people, particularly those compelled to serve in the growing infantry, and every wise ruler therefore sought to gain their physical and psychological allegiance, unifying them in outlook and perspective as Suntzu had advised. This would be accomplished by following the Tao, tantamount to imposing a benevolent dictatorship; not interfering with the occupations and seasonal activities of the people; implementing moral policies stressing Virtue; reducing the hardships imposed upon them, such as the corvee labor duties; and eliminating whatever proves harmful. "Gaining the masses" also required minimizing the length and frequency of campaigns by pursuing an enlightened military policy that would allow them adequate rest. Accordingly, Sun Pin is now praised for having opposed frequent and extensive warfare, although he was hardly alone among the military thinkers, all of whom viewed warfare as the greatest affair of state, following Sun-tzu who pointedly condemned prolonged campaigns.

Certain characteristics applicable to all organizations are deemed critical to forging an effective military force: selecting men; imposing regulations and developing strict discipline; fostering trust and certainty, so that commands will be immediately obeyed, and rewards and punishments will be effective; and creating and nurturing internal coherence, unity, and harmony. Moreover, while all human activities are predicated upon them, daring and decisiveness are also required, rather than hesitancy and protraction. Key subordinates and lower level commanders must equally enjoy a full measure of authority, the confidence of their superiors, and support from the troops.

Finally, Sun Pin offers a few observations about the character and qualifications necessary for a commanding

general, although not as systematically as in his later chapters or several of the other strategists. While knowledge is obviously critical, the three traits singled out are trust, loyalty, and daring. Virtually every military thinker emphasized courage and some stressed knowledge, but Sun Pin focused upon loyalty by stating, “If someone is not loyal to the ruler, you cannot risk employing him in the army.” In his period of rising military specialization and professionalism, powerful generals posed potentially greater threats to the ruler than a state’s external enemies. Since, to be effective, the commanding general had to be granted unhampered authority over his troops, the temptation to usurp power when triumphantly returning to the capital must have posed serious problems for every political leader. Accordingly, other texts of the period, including the *Ssu-ma Fa,* offered advice on how to dissipate power and assimilate the troops back into normal, sedentary life. Such problems are not unknown even in the twentieth century, nor among successful subordinates in large enterprises, reluctant to assume a secondary role and lessened prestige after wielding virtually sole power over significant domains, projects, subsidiaries, or overseas branches.

6
Lunar Warfare

SUN-TZU SAID:

"In the region between Heaven and Earth nothing is more noble than man. Warfare is not a matter of a single factor. If the seasons of Heaven, the advantages of Earth, and the harmony of men, these three, are not realized, even though one might be victorious there will be disaster. For this reason they must be mutually relied upon to engage in battle; thereafter only when it is unavoidable engage in warfare. Thus if one accords with the seasons to engage in warfare, it will not be necessary to employ the masses again. If one engages in battle without any basis and gains a minor victory, it is due to astrological influences."

Sun Pin said: "If in ten battles someone is victorious six times, it is due to the stars. If in ten battles someone is victorious seven times, it is due to the sun. If in ten battles someone is victorious eight times, it is due to the moon. If in ten battles someone is victorious nine times, the moon has waxed strongly. If in ten battles someone is victorious ten times, the general excels, but it leads to misfortune."

Sun Pin said: “There are five factors which preclude victory. If any one of the five is present you will not be victorious. Thus in the Tao of warfare there are the following common situations: Many men are killed but the company commanders are not captured. The company commanders are captured but the encampment is not taken. The encampment is taken but the commanding general is not captured. The army is destroyed and the general killed. Thus if one realizes the Tao, even though the enemy wants to live they cannot.”

COMMENTARY

This chapter is marred by obliterated characters and fragmented portions, and was probably assembled from disjointed paragraphs. However, as the title suggests, it preserves valuable materials reflecting a belief in the effects of astrological influences upon military affairs. At the same time, it is prefaced by Sun Pin’s statement that “nothing is more noble than man,” orienting him at least partially within the tradition of the military thinkers who stressed man rather than otherworldly factors.

In the second paragraph Sun Pin apparently reprises the view that, lacking the sound basis of Heaven, Earth, and Man enumerated in the first section, being victorious in a majority of engagements stems from the favorable influence of one or another of the astrological factors. While this hardly seems consonant with his overall work, the thoughts of his famous ancestor, or subsequent writings which explicitly reject such beliefs and practices, it apparently mirrors some views common to his age. Among them one approach closely intertwined military activities with stellar and lunar influences, times, and portents, perhaps itself being derived from the ancient tradition of employing

divination before all significant undertakings, including battles and campaigns. However, from Sun-tzu on the progenitors of the *Seven Military Classics,* even when acknowledging the persistence of such customs, redirected the focus onto men, explicitly rejecting these rituals and inclinations. Confucius, roughly contemporary with Sun-tzu, when questioned about how to serve the spirits, replied: “When you are not yet able to serve men, how can you serve spirits?” Sun-tzu himself, who emphasized rational preparation for warfare and human activity, stated in a different context: “Advance knowledge cannot be gained from ghosts and spirits, inferred from phenomena, or projected from the measures of Heaven, but must be gained from men, for it is the knowledge of the enemy’s true situation.” The T’ai Kung is historically noted for having emphatically rejected the validity of divination when King Wu’s campaign against the Shang dynasty in 1045 B.C. encountered heavy weather. In his well-known view, the results for a usurper mounting a bloody revolution could hardly be auspicious. Finally, the opening sequence of the *Wei Liao-tzu* points out that military success and failure are unrelated to astrological influences, concluding: “From this perspective, ‘moments,’ ‘seasons,’ and ‘Heavenly Offices’ are not as important as human effort.”

In light of Sun-tzu’s views and those of the military thinkers just subsequent to his age, it is somewhat puzzling that Sun Pin would still strongly embrace a theory of astrological influences. Were the statements less specific in their referents they might be understood as simply expressing the thought that not being constantly victorious is a matter of luck. (In the victory hierarchy preserved in the chapter’s second paragraph, the moon clearly stands out as exerting the most powerful influence, no doubt because military affairs were considered *yin* activities. In fact, the moon is the symbol par excellence for *yin,* the sun being the paramount embodiment of *yang.*) However, the chapter does conclude with his assertion that one who has realized

the Tao of warfare will achieve total victory, implying that his analysis applies to those who engage in warfare without the proper foundation or military acumen. This doesn't negate the credibility he tangentially assigns to such influences, just the domain of applicability.

The last paragraph, which may well be misplaced in this chapter, lacks an unknown number of initial sentences. Probably five factors or examples illustrating these factors have already been discussed, thereby setting the context for the summary statements that have been preserved. Even though the connective "thus" is employed to introduce the topic which follows—the Tao of warfare—only three examples of presumably incomplete victories are iterated. Therefore, despite claims by some modern commentators, it appears that the connective is simply employed in a general sense, to bridge rather than logically conclude, much as in Sun-tzu. The translation accordingly reflects our belief that Sun Pin is merely discussing some general cases, not positing five types of incomplete victory. However, some modern analysts interpret the paragraph as illustrating Sun Pin's doctrine that only an enemy's extermination can constitute a true victory—a view that would certainly reflect the brutality of the last part of the Warring States period. This would of course contrast markedly with Sun-tzu's belief that the greatest victory is achieved when the enemy's forces are preserved intact.

7
Eight Formations

SUN-TZU SAID:

"When someone whose wisdom is inadequate commands the army it is conceit. When someone whose courage is inadequate commands the army it is bravado. When someone does not know the Tao nor has engaged in a sufficient number of battles commands the army it becomes a matter of luck.

"To ensure the security of a state of ten thousand chariots; to bring glory to the ruler of ten thousand chariots; and to preserve the lives of the people of a state of ten thousand chariots, only a general who knows the Tao is capable. Above he knows the Tao of Heaven; below he knows the patterns of Earth; within the state he has gained the hearts of the people; outside it he knows the enemy's true condition; and in deploying his forces he knows the principles for the eight formations. If he perceives victory he engages in battle; if he does not perceive it he remains quiet. This is the general of a true king."

Sun Pin said: "As for employing the eight formations in battle: in accord with the advantages of the terrain use appropriate formations from among the eight. Employ a deployment which segments the troops into three, each

formation having an elite front, and each elite front having a rear guard. They should all await their orders before moving. Fight with one of them, reserve the other two. Employ one to attack the enemy, use the other two to consolidate the gains. If the enemy is weak and confused, use your picked troops first to exploit it. If the enemy is strong and well disciplined, use your weak troops first in order to entice them.

"The chariots and cavalry that participate in a battle should be divided into three forces, one for the right, one for the left, and one for the rear. If the terrain is easy make the chariots numerous; if dif- ficult, make the cavalry numerous. If constricted then increase the crossbows. On both difficult and easy terrain you must know the 'tenable' and 'fatal' ground. Occupy tenable ground, attack on fatal ground."

COMMENTARY

This chapter—one of the few preserved intact—largely represents a continuation and explication of tactical principles first advanced by Sun-tzu in the *Art of War.* It begins by noting Sun Pin's own observations on the general's character and qualifications, although presented in terms of problems posed by three major deficiencies. Wisdom, courage, and knowledge of the Tao are commonly found among the military writers; Sun Pin uniquely ties the latter to battle experience. When a general lacks both combat experience and the requisite knowledge, the army's fate becomes a matter of luck. "Knowledge of the Tao," previously mentioned and in common with most military writings, includes that of natural conditions; the desires of the people; the enemy's true situation; and the principles of military deployment. (Sun Pin apparently allowed for gaining such knowledge through means other than battlefield

experience; otherwise, there would be no need to couple them.)

Perhaps the most significant characteristic that qualifies generals or other leaders to actually undertake command is the ability to refrain from engaging in battle when victory is not apparent. In other words, external pressures, fear for reputation, and similar factors should not be allowed to affect the objective analysis of the enemy nor force the army into action. The underlying thought of Sun-tzu's *Art of War* is that combat should be undertaken only when victory is apparent. To this end he advised that generals might have to ignore their ruler's commands and concluded: "If it is not advantageous do not move. If objectives can not be attained do not employ the army." Furthermore, the *Six Secret Teachings* states: "In military affairs nothing is more important than certain victory. One who excels at warfare will await events in the situation without making any movement. When he sees he can be victorious he will arise; if he sees he cannot be victorious he will desist." In the *Wei Liao-tzu* an even broader principle governs: "The army cannot be mobilized out of personal anger. If victory can be foreseen then the troops can be raised. If victory cannot be foreseen, then it should be stopped."

Although Sun Pin differentiates and characterizes ten formations in chapter sixteen (entitled "Ten Deployments"), whether the "eight formations" in the title and the text refer to eight different formations, such as the circular, square, and angular; the outer eight positions of a nine space square (three horizontal, three vertical); or simply comprise a general rubric has stimulated considerable discussion. From the context it appears that eight different formations are intended, each being chosen as appropriate to the configuration of terrain. However, definitive evidence is lacking, and later discussions cannot be reliably projected back into antiquity.

In this chapter Sun Pin again advises segmenting the army into three forces, employing one as an active strike

force while keeping two of them in reserve. Although the character he employs also means “defense,” and their role in defending the army’s primary position should not be slighted, no doubt their intended function is the execution of ever evolving tactics and providing a flexible response to battlefield developments, such as through the implementation of the unorthodox measures Sun Pin discuses extensively in chapter thirty. Sun Pin appears to have been the first to employ the “subtracted reserve” in his campaigns, and this chapter provides the first systematic articulation of the concept and its tactical realization.

The chapter also points out the importance of conforming the formation, the disposition of the force components, to the terrain’s configuration. Although Sun-tzu classified commonly encountered configurations of terrain by their defining features, and suggested appropriate tactical measures for engaging the enemy, he did not discuss the types of formations, nor do the historical records from the period contain more than a few cursory references. While Sun Pin applies Sun-tzu’s concepts, his insights into force and weapon specialization represent an advance. However, compared with the late Spring and Autumn period, armies in Sun Pin’s age were marked by a greater diversity in battlefield elements, the crossbow and (probably) the cavalry having appeared, and the role of the infantry having been extensively broadened.

The final sentences expound the fundamental principle for surviving and exploiting terrain: “On both difficult and easy terrain you must know the ‘tenable’ and ‘fatal’ ground. Occupy tenable ground and attack an enemy on fatal ground.” In this sentence “easy” and “difficult” terrain implicitly subsume all types of terrain; therefore the principle is simply that the general must know what positions are tenable, which positions inherently fatal. “Tenable terrain” (which originally appears in the *Art of War*) is literally terrain that will sustain life, often identified by the

commentators with heights and the sunny side of mountains, although it obviously encompasses any terrain which can easily be held to advantage. Furthermore, it is generally ground which does not contain, nor lie near any of the dangers and pitfalls which can endanger and destroy an army, such as ravines, rivers, and marshes. “Fatal terrain” (or ground) is defined in the *Art of War* as: “where, if one fights with intensity he will survive, but if he does not fight with intensity he will perish.” Sun-tzu strongly believed that soldiers would attain maximum fervor when confronted by imminent, apparently inescapable death, forced into an impossible situation on fatal ground: “Cast them into hopeless situations and they will be preserved; have them penetrate fatal terrain and they will live.” This of course suggests that the final, ambiguous injunction “to attack on fatal ground” should be understood as taking the offensive and mounting an attack whenever one finds oneself on fatal ground, assuming it is not possible to escape intact. This differs significantly from the common—and certainly tactically equally valid—assertion that it refers to targeting any enemy that ventures onto fatal terrain.

8
Treasures of Terrain

SUN-TZU SAID:

“As for the Tao of terrain, *yang* constitutes the exterior, *yin* constitutes the interior. The direct constitutes the warp, techniques constitute the woof. When the woof and the warp have been realized deployments will not be confused. The direct traverses land where vegetation thrives; techniques take advantage of where the foliage is half dead.

“As for the field of battle, the sun is the essence but the eight winds which arise must not be forgotten. Crossing rivers; confronting hills; going contrary to the current’s flow; occupying killing ground; and confronting masses of trees—all these that I have just mentioned, in all five one will not be victorious.

“A mountain on which one deploys on the south side is a tenable mountain; a mountain on which one deploys on the eastern side is a fatal mountain.

“Water that flows to the east is life-sustaining water; water that flows to the north is deadly water. Water that does not flow is death.

“The conquest relationship of the five types of terrain is as follows: mountains conquer high hills; high hills conquer hills; hills conquer irregular mounds; irregular mounds conquer forests and plains.

“The conquest relationship of five types of grasses is as follows: profusion of hedges; thorny brambles; cane; reeds;

and sedge grass.

“The conquest relationship of the five soils is as follows: blue conquers yellow; yellow conquers black; black conquers red; red conquers white; white conquers blue.

“Five types of terrain are conducive to defeat: gorges with streams; valleys; river areas; marshes; and salt flats.

“The five killing grounds are Heaven’s Well; Heaven’s Jail; Heaven’s Net; Heaven’s Fissure; and Heaven’s Pit. These five graves are killing grounds. Do not occupy them, do not remain on them.

“In the spring do not descend; in fall do not ascend. Neither the army nor any formation should attack to the front right. Establish your perimeter to the right; do not establish your perimeter to the left.”

COMMENTARY

This chapter, which discusses configurations of terrain best avoided and provides some general observations about the respective values of various physical aspects, corresponds in the “earthly sphere” to the earlier one entitled “Lunar Warfare.” Many of the concrete contents are identical with those raised in the *Art of War,* and may also be found scattered throughout the *Seven Military Classics.* Clearly every strategist and commander had to be cognizant of such dangers, as well as the principles for exploiting them.

The first paragraph apparently introduces a fundamental principle of terrain by conceptualizing the topography in terms of *yin* and *yang,* and advising that both—entailing the orthodox and unorthodox—must be employed for effective command. The second paragraph emphasizes deploying one’s forces to utilize the sun’s rays and accord with the prevailing winds. It then describes five situations in which advancing to engage an enemy would be tactically

inadvisable, all of which stem from the *Art of War* or are otherwise common to ancient military thought.

The third and fourth paragraphs, which assign survival indices apparently based upon directional values, are the subject of intense speculation. The final paragraph also assigns directional priorities which would equally seem to lack any grounds for absoluteness, although they might have relative validity in limited situations.

The first three of the remaining five paragraphs array heights, grasses, and soils in sequences based upon relative conquest power. Heights may be understood simply in terms of greater heights being strategically superior to lesser ones, while the grasses are ranked according to their strength and ability to impede advancing forces. However, the five soils are characterized in terms of one of the conquest cycles found in five phase ("element") correlative theory. Unfortunately, while the sentence is perfectly intelligible, the underlying meaning and implications remain to be understood, prompting Marxist scholars to condemn it as magical musings. Whether Sun Pin truly believed in the efficacy of such relationships or merely included them for theoretical purposes; or whether they are simply later accretions remains to be studied.

Finally, Sun Pin lists two further sets of five: "terrains conducive to defeat" and "killing grounds." Most of these are also found in other military writings, and the names of the latter all appear in the *Art of War,* having become common military knowledge thereafter. As usual Sun Pin has not provided any definitions; therefore the only recourse remains commentaries for similar terms in other military works. However, in every case the basic principle is simply that configurations of terrain which constrict an army's movement are to be avoided; otherwise, an astute enemy will bring the awesome long-range power of bows and crossbows to bear, easily decimating a confined target. So too in all aspects of life, where the confined, constricted,

and clearly defined sacrifice freedom and become easy prey for immeasurable onslaughts.

9
Preparation of Strategic Power

SUN-TZU SAID:

“Now being endowed with teeth and mounting horns, having claws in front and spurs in back, coming together when happy, fighting when angry, this is the Tao of Heaven, it cannot be stopped. Thus those who lack Heavenly weapons provide them themselves. This was an affair of extraordinary men. The Yellow Emperor created swords and imagized military formations upon them. Yi created bows and crossbows and imagized strategic power on them. Yü created boats and carts and imagized tactical changes on them. T’ang and Wu made long weapons and imagized the strategic imbalance of power on them.

“Now these four—formations, power, changes, and strategic imbalance of power—are the employment of the military. How do we know that swords constituted the basis for formations? Morning and night they are worn but not necessarily used. Thus it is said, deploying in formation but not engaging in battle, this is how the sword constitutes the basis for formations. If a sword has no edge, even someone with the courage of Meng Pen would not dare advance into battle with it. If a formation has no elite front, anyone without the courage of Meng Pen who would dare command

it to advance does not know the essence of military affairs. If a sword lacks a haft, even a skilled officer would be unable to advance and engage in battle. If a formation lacks a rear guard, anyone who is not a skilled officer but dares command it to advance does not know the true nature of military affairs. Thus if there is an elite front and rear guard, and they mutually trust each other and are unmoving, the enemy's soldiers will invariably run off. Without an elite front and rear guard, the army will be worn out and disordered.

"How do we know that bows and crossbows constituted the basis for strategic power? Released from between the shoulders they kill a man beyond a hundred paces without him realizing the arrow's path.

Thus it is said that bows and crossbows are strategic power.

"How do we know that boats and carts constituted the basis for tactical changes? . . . . .

"How do we know that long weapons constituted the basis for the strategic imbalance of power? In attacking they neither need to strike from high nor from below but still shatter the forehead and destroy the shoulders. Thus it is said that long weapons are the basis for the strategic imbalance of power.

"In general, as for these four—those who gain these four survive, those who lose these four die. They must be complied with in order to complete their Tao. If one knows their Tao then the army will be successful and the ruler will be famous. If someone wants to employ them but does not

know their Tao, the army will lack success. Now the Tao of the army is fourfold: formations, strategic power, changes, and strategic imbalance of power. Investigating these four is the means by which to destroy strong enemies and take fierce generals. What is seen up close but strikes far off is the strategic imbalance of power. In the daytime making the flags numerous, at night making the drums many is the means by which to send them off to battle. Now these four are the employment of the military. People all take them for their own use, but no one penetrates their Tao.

“One who has an elite front is extremely cautious in selecting troops for the formations.”

COMMENTARY

This relatively well-preserved chapter envisions combat as an inherent aspect of human and animal behavior, and therefore inevitable. Although Sun Pin was not the only military thinker to believe the origin of warfare is to be found in the very roots of antiquity, his attribution of four fundamental military concepts—formations, strategic power, changes, and strategic imbalance of power—to the ancient cultural heroes credited with creating the elements and artifacts of civilization is uncommon. However, two subsequent philosophical works contain similar views and even virtually identical passages, with one of them even perceiving man’s weakness in the face of natural and human threats to be the basis for social order, stimulating the formation of groups to protect the individual. Moreover, Hsün-tzu, a late Warring States philosopher best remembered for his assertion that human nature is

inherently selfish and thus tends to evil, believed that since desire is the root cause of conflict, only the imposition of governmental restraints will resolve it.

Most of the military writings justify military activities only to defend the state against aggression and rescue the people from the inflictions of brutal oppressors. However, even in them two somewhat contradictory depictions of society under the guidance of the ancient Sages appear. One view holds that it was an ideal age: the realm was tranquil, the people at peace in their occupations. Accordingly, violence and perversity arose only after a precipitous decline in the ruler's Virtue, the ensuing disorder having to be quelled through forceful military measures. This interpretation of history as a devolvement from a golden age tends to characterize warfare as essentially evil, frequently echoing Lao-tzu's famous dictum, "the army is an inauspicious implement." Therefore, conscientious moral rulers can undertake punitive military actions only with great reluctance, in the full recognition that Heaven abhors such violence. The *Three Strategies* states: "The Sage King does not take any pleasure in using the army. He mobilizes it to execute the violently perverse and to rectify the rebellious. The army is an inauspicious implement, and the Tao of Heaven abhors it. However, when its use is unavoidable it accords with the Tao of Heaven." Clearly "the Tao of Heaven abhors it" dramatically contradicts Sun Pin's view in this chapter, "this is the Tao of Heaven, it cannot be stopped."

The second view, associated here with Sun Pin, perceives the Sages and cultural heroes as having arisen in response to the world's chaos, dramatically acting to quell disorder and cre- ate security for the people. Most of the military writings, including Sun-tzu's *Art of War,* stress the deadly importance of military campaigns, while some emphasize that the ruler must cultivate his moral worth and initiate military actions directed toward reducing the people's suffering. However, the *Military Methods* is less concerned

with such objectives than with actual theory and the science of military art.

The concept that fighting is the natural result of anger has its counterpart in the military theorists' motivational psychology of warfare. In general, most of them discussed measures designed to stimulate the men's spirits, nurture their *ch'i,* and coerce them into fervently engaging the enemy. Sun-tzu had earlier said, "What motivates men to slay the enemy is anger." Based upon this chapter Sun Pin would certainly agree because anger is the root cause of conflict.

As for the four essential military concepts, three were previously raised by Sun-tzu, with only the topic of formations not receiving any significant discussion until later works. In Sun Pin's interpretation of history, all four originated in the minds of the Sages who derived them from concrete weapons and inventions, rather than from abstract images. Thus, having fashioned the first sword, the Yellow Emperor modeled the concept of formations upon the concrete sword, rather than creating swords in concrete imitation of some nebulous image. Similarly, bows and crossbows, which act at a distance and provide the user with a critical distance advantage, were the basis for the concept and realization of the strategic configuration of power. Boats and carts, which provide mobility and make it possible to suddenly shift a deployment or race to a position, were the basis and means to realize change. And finally long weapons and especially missile weapons, which facilitate striking from a relatively safe distance while closing with an enemy, convey a temporal tactical advantage when wielded against short weapons, and thus underlie the concept and provide a basis for the strategic imbalance of power. When the four are fully understood and analytically employed, the astute commander can dominate the battlefield, being active rather than passive, and effect the essential tactical principles advocated by both Sun-tzu and Sun Pin.

10
Nature of the Army

SUN-TZU SAID:

"If you want to understand the nature of the army, the crossbow and arrows are the model. Arrows are the troops, the crossbow is the general. The one who releases them is the ruler. As for arrows, the metal is at the front, the feathers are at the rear. Thus they are powerful and excel in flight, for the front is heavy and the rear is light. Today in ordering the troops the rear is heavy and the front light, so when deployed in formation they are well ordered, but when pressed toward the enemy they do not obey. This is because in controlling the troops men do not model on the arrow.

"The crossbow is the general. When the crossbow is drawn, if the stock is not straight, or if one side of the bow is strong and one side weak and unbalanced, then in shooting the arrow the two arms will not be at one. Then even though the arrow's lightness and heaviness are correct, the front and rear are appropriate, it still will not hit the target.

"If the general's employment of his mind is not in harmony with the army, even though the formation's

lightness and heaviness are correct, and the front and rear are appropriate, they still will not conquer the enemy.

“Even if the arrow’s lightness and heaviness are correct, the front and rear are appropriate, the crossbow drawn straight, and the shooting of the arrow at one, if the archer is not correct, it still will not hit the target. If the lightness and heaviness of the troops are correct, the front and rear appropriate, and the general in harmony with the army, but the ruler does not excel, they still will not conquer the enemy.

Thus it is said for the crossbow to hit the objective it must realize these four. For the army to be successful there must be the ruler, the general, and the troops, these three. Thus it is said that an army conquering an enemy is no different from a crossbow hitting a target. This is the Tao of the military. If the model of the arrow is complied with, the Tao will be complete. When someone understands the Tao, the army will be successful, and the ruler will be famous.”

COMMENTARY

Although this chapter has suffered considerable damage, the extensive missing portions can be fairly well reconstructed because of the parallelism employed as Sun Pin develops his argument. The “Nature of the Army” emphasizes two points: first, attack formations must be powerful to the front; second, there must be coherence and unity among all members, and at all levels, of the command hierarchy.

In previous chapters Sun Pin has already asserted the importance of employing an elite, spirited front in order to explosively penetrate the enemy's ranks. This section further justifies it with the analogy of the arrow with its metal point and therefore weight in the front, and the comparatively lighter feathers to the rear. However, this should not be viewed as an absolute principle, for earlier he had advocated withholding two thirds of the forces as a reserve capable of executing defensive and unorthodox tactics. But within the context of battlefield situations, his concept is clear: the necessary impact in an attack will be created by concentrating mass at the front of a chosen formation rather than retaining it in the rear.

The arrow analogy is further developed in terms of the crossbow and archer to illustrate the need for cooperation and harmony among all three, as well as for correctness to characterize them individually. If the general acts as the crossbow, then his tactics must be correct and balanced; otherwise, the troops will be used in an unbalanced fashion, defeat resulting. Furthermore, his intentions must penetrate to the officers and troops and they must be harmonized with him so that there will be no gaps or dissension. An image frequently employed by the military writers to concretely depict their relationship is that of the mind and the four limbs. For example, the *Wei Liao-tzu* states: "Now the general is the mind of the army, while all those below him are the limbs and joints. When the mind moves in complete sincerity, then the limbs and joints are invariably strong. When the mind moves in doubt, then the limbs and joints are invariably contrary. Now if the general does not govern his mind, the troops will not move as his limbs."

The ruler, who stands as the archer in ultimately determining the campaign's direction and objectives, must also be correct and presumably in harmony with the general. Since several of the ancient strategists, including Sun-tzu and Sun Pin, strongly condemned his interference once the commanding general had received his mandate,

the question of the ruler’s correctness would primarily have reference to his role in the early councils that would determine the appropriateness and feasibility of undertaking military activities. This is why the general is the crossbow, rather than the archer, although the analogy cannot be pressed too far because he must become both the archer and bow in the field.

The implications for leaders concerned with establishing corporate or group direction are immediately apparent. Any perceptible inclination in the commander immediately, even unconsciously, translates into group orientation despite overt statements much to the contrary. Any bias or emotional deficit similarly affects fundamentals, including direction, interpretation, and effort. In sum, the commander must retain appropriate balance while clearly defining organizational tasks and committing resources to the project.

11
Implementing Selection

SUN-TZU SAID:

Su “The Tao for employing the military and affecting the people is authority and the steelyard. Authority and the steelyard are the means by which to select the Worthy and choose the good. *Yin* and *yang* are the means by which to assemble the masses and engage the enemy. First you must correct the balance, then the weights, and then they will have already attained the standard. This is referred to as being inexhaustible. Evaluate talent and performance by weighing them with the standard, solely to determine what is appropriate.

“Private and state wealth are one. Now among the people there are those who have insufficient longevity but an excess of material goods, and those who have insufficient material goods but an excess of longevity. Only enlightened kings and extraordinary men know this, and therefore can retain them. The dead will not find it odious, those from whom it is taken will not be resentful. This is the inexhaustible Tao. When properly implemented, the people will all exhaust their strength. Those near the ruler will not commit thievery, those far away will not be dilatory.

“When material goods are plentiful there will be contention; when there is contention the people will not regard their superiors as Virtuous. When goods are few they will incline toward their superiors; when they incline toward them then All under Heaven will respect them. If what the people seek is the means by which I seek their performance, this will be the basis for the military’s endurance. In employing the army this is the state’s treasure.”

COMMENTARY

This brief chapter is fraught with problems, causing the commentators to offer widely divergent interpretations for both individual sentences and the chapter’s overall meaning. Apart from the obviously damaged portions, in several places it appears the original copyist may have forgotten characters or even lost paragraphs. The first paragraph is reasonably clear: in order to effectively select and employ men, standards must be employed. Appropriate standards make it possible not only to judge an individual’s abilities and moral qualifications, but also his character and personal inclinations. Although various criteria and impromptu tests for evaluating men are found throughout the military classics, only Sun Pin, in common with the Legalist Lord Shang who was active in his era, made the concept of employing standards explicit.

The reference to *yin* and *yang* in the first section of the chapter commands attention. Unfortunately Sun Pin has not indicated what sort of concrete measures they would entail; however, between them *yin* and *yang* of course encompass all possible government policies, tactics of battle, and

methods for employing men. *Yin* may well refer to coercive measures, the dark virtue of government, and *yang* to rewards and incentives, the positive side. As translated, the basis—authority and the steelyard—would subsume rewards and punishments, commonly recognized as the twin handles of power in antiquity, under the ruler's authority. Without the power to punish and reward, his authority would lack an effective foundation, his commands would be unenforceable, and his appointees unaccountable.

The second paragraph of "Implementing Selection" contains some statements of possibly great historical import depending upon how the sentences are understood. The translation is fairly literal, suggesting the enigmatic character of the original. The first sentence, "private and state wealth are one," expresses Sun Pin's view that there should not be any distinction between state and personal material wealth. Rather, utilizing all sources of wealth for government ends, including military activities, is critical. Policies that exploit the imbalance between goods and longevity, between possession and desire, that marks human existence will successfully provide the state with inexhaustible resources. While most commentators would understand the sentence, "Now among the people there are those who have insufficient longevity but an excess of material goods, and those who have insufficient material goods but an excess of longevity," as describing a felt dissatisfaction with either life or mate- rial goods, Sun Pin appears to be simply contrasting their paired nature. Obviously people with excess wealth have to be motivated in other ways, while those lacking the essentials for life can be coerced to disregard their lives in the pursuit of government rewards. Assuming the introduction of an appropriate system of rewards and punishments, men who die under arms will not resent their deaths, and those from whom goods are confiscated will not complain. This will create a tranquil, orderly society in which the people all

exhaust their energies, while not presuming upon their positions to commit thievery.

The last paragraph is interesting for it suggests a doctrine starkly in contrast to the prevalent Warring States viewpoint, that scarcity inevitably leads to conflict, because Sun Pin appears to believe that a plethora of material goods stimulates people to disregard the incentives offered by government, slighting the “Virtue” of the ruler. Conversely, when goods are scarce and mainly available through government incentives, people will be compelled to focus upon them and will accordingly value them. Moreover, they will be forced to compete for them by behaving in a structured way, whereas when goods are widely available they can freely accumulate and contend for them among themselves. Since only the state has the resources to satisfy the people, as long as its incentives remain credible and timely, it can manipulate the populace through their desires and attain the ultimate objective of military thinkers—mounting extensive campaign efforts that compel men to endure prolonged exposure to hardship and danger.

12
Killing Officers

SUN-TZU SAID:

“Make rewards and emoluments clear and then the troops will advance without hesitation. If you invariably investigate and implement them, the officers will die. If you kill the officers, then the officers will certainly submit to your awesomeness.

“After you have determined your plans, cause the officers to know them. Knowledgeable officers can be trusted, so do not allow the people to depart from them. Only when victory is certain does one engage in battle, but do not let the soldiers know it. When engaged in battle do not forget the flanks.

“If you treat them deferentially then the officers will die for you. Even though the officers will die, their names will be transmitted to posterity. If you encourage them with fundamental pleasures, they will die for their native places. If you importune them with family relationships, they will die for the ancestral graves. If you honor them with feasts, they will die for the honor of food and drink. If you have them dwell in tranquility, they will die in the urgency of defense. If

you inquire about their febrile diseases, they will die for your solicitude.”

COMMENTARY

The remnants of this chapter, identified by a notation on the back of the strips as “Killing Officers,” are too fragmented to permit more than the rather tentative reconstruction provided here. The first sentence advances one of the fundamental principles found in most Warring States writings for effectively implementing rewards and incentives, “make rewards and emoluments clear.” Only when they are extensively promulgated, thoroughly understood, and rigorously implemented will incentives motivate people to undertake desired courses of action or soldiers to fervently advance into battle and be willing to die without regret.

The first paragraph’s concluding sentence, beginning “if you kill the officers,” may refer to subjecting any transgressors among the officers to capital punishment as an example to the remainder. When punishment—especially capital punishment—is visibly inflicted upon the higher ranks, subordinates and ordinary troops become fearful. Accordingly, the military writings stress that in administering punishment the great and noble should never be spared, thereby striking awe into the troops, causing them to obey their commands and fight aggressively.

The second paragraph explicitly advances the rarely voiced but certainly assumed principle that “knowledgeable officers can be trusted.” Whether this knowledge refers simply to their personal knowledge of rewards and punishments (and thus to their certain fidelity), or to their command expertise is unclear. However, the thought that subordinates can be relied upon, and that the people should

cling to them, is unusual even though ancient Chinese forces all had strong chains of command and clear hierarchical organization. “Do not let the people know it,” starkly contrasts with having knowledgeable officers, but also mirrors one of Sun-tzu’s thoughts: “In accord with the enemy’s disposition we impose measures on the masses that produce victory, but the masses are unable to fathom them.” Sun-tzu also said: “At the moment the general has designated with them, it will be as if they ascended a height and abandoned their ladders. The general advances with them deep into the territory of the feudal lords and then releases the trigger. He commands them as if racing a herd of sheep— they are driven away, driven back, but no one knows where they are going.”

The principle that “only when victory is certain does one engage in battle” summarizes the Sun family approach to initiating combat. In his fourth chapter, which explicates the nature of victory and defeat, Sun-tzu stated: “The victorious army first realizes the conditions for victory, and then seeks to engage in battle. The vanquished army fights first, and then seeks victory.” Sun-tzu further advocated making oneself unconquerable before attempting to conquer the enemy. Consequently, whenever prospects for victory prove uncertain, temporizing and defensive measures should be employed. Furthermore, the ruler should not mobilize the army except under appropriate conditions, a sentiment found in several other important texts from the period.

The concluding paragraph—whose translation represents our best attempt to puzzle out the overall meaning of a series of disjointed, fragmentary strips—dramatically changes the chapter’s complexity. Basically this paragraph entails a discussion of motivation applicable in many spheres, questioning what will stimulate men to act, what they will kill to protect.

Apart from anger, the most prominent factors raised by the military writings encompass shame, rewards and punishments, family, and native place. The various military

writings also emphasized that the commanding general should evince an ongoing solicitude for the welfare and physical condition of his men, being certain to set a personal example and share their hardships. Treating them with appropriate courtesy, as Sun Pin indicates, will also accord them the requisite respect.

13
Expanding Ch’i

SUN-TZU SAID:

“When you form the army and assemble the masses, concentrate upon stimulating their *ch’i*. When you again decamp and reassemble the army, concentrate upon ordering the soldiers and sharpening their *ch’i*. When you approach the border and draw near the enemy, concentrate upon honing their *ch’i*. When the day for battle has been set, concentrate upon making their *ch’i* decisive. When the day for battle is at hand, concentrate upon expanding their *ch’i*.

“The commanding general assembles the troops and promulgates the mission statement in order to overawe the warriors of the Three Armies, the means by which he stimulates their *ch’i*.

“The commanding general reassembles the troops and issues his orders, the means by which to sharpen their *ch’i*.

“The short coat and coarse clothes, which encourage the warriors’ determination, are the means by which to hone their *ch’i*. Prior to striking out for the engagement the commanding general issues orders to have every single man prepare three days’ rations. As for the state’s soldiers, their families are honored and the men motivated.

“When about to engage in combat, sever all communications to cut off hope for life. Emissaries do not come from the state, officers from the army do not go forth in order to make the troops’ *ch’i* decisive. The commanding general summons the commander of the camp security forces and informs him: ‘Do not stint the men’s food or drink in order to expand their *ch’i*.’

“When encamping upon easy terrain you must be numerous and esteem the martial, for then the enemy will certainly be defeated. If their *ch’i* is not sharp they will be plodding. When they are plodding they will not reach their objective. When they do not reach their objective, they will lose the advantage.

“When on campaign, if their *ch’i* is not honed the soldiers will be frightened. When they are frightened they will mass together. When they mass together they will be unable to respond to the enemy’s assault.

“When their *ch’i* is not decisive then they will be slack. When they are slack they will not be focused and will easily disperse. If they easily disperse, when they encounter difficulty they will be defeated.

“If their *ch’i* is not expanded, they will be lazy. If they are lazy it will be difficult to employ them. If it is difficult to employ them they will not be able to converge on their objective.

“If they are not exposed to hardship, they will not know to constrain themselves. When they do not know to constrain themselves affairs will be overturned.

“If the members of the squad of five lose a member and fail to rescue him, they themselves will die and their families will be exterminated. The commanding general summons his subordinates, exhorts them, and then attacks.”

COMMENTARY

This intriguing chapter preserves the outlines of a psychology of battlefield motivation conceptualized in terms of *ch’i*, the essential spirit or pneuma of life, one that equally characterizes human endeavors in all fields and especially contemporary times. The ancient military writers were acutely aware that an army’s performance in battle—irrespective of its equipment, training, and general condition—would depend mainly upon the motivation and commitment of its soldiers. Numerous concrete measures were therefore systematically employed to direct their preparation for combat from the earliest training stages through the final drumming of the advance and the actual

engagement. Remnants of these are recorded in the *Seven Military Classics,* together with comments upon their effectiveness and manipulation. In “Expanding *Ch’i*” Sun Pin has described the normative sequence of *ch’i* states that must be realized, although the actual techniques for attaining them remain unknown because of the damaged condition of the strips.

Even though the Military Classics were composed over a span of two centuries or more during which concepts and tactics evolved significantly, the extant texts generally recognize and agree upon the basic assumptions and underlying role of *ch’i*. The early *Ssu-ma Fa* contains an oft-quoted sentence: “In general, in battle one endures with strength, and gains victory through spirit.” Later the *Wei Liao-tzu* explicitly identified *ch’i* as the decisive component: “Now the means by which the general fights is the people; the means by which the people fight is their *ch’i*. When their *ch’i* is substantial they will fight; when their *ch’i* has been snatched away they will run off.”

Realizing that a loss of *ch’i* renders an army susceptible to defeat, the astute general focuses upon formulating strategies and tactical principles to manipulate the enemy, causing his forces to suffer just such a loss. This was one of the main thrusts of the *Art of War,* for Sun-tzu emphasized being active, rather than passive, controlling the development of events rather than being compelled into movement by others: “The *ch’i* of the Three Armies can be snatched away, the commanding general’s mind can be seized. For this reason in the morning their *ch’i* is ardent; during the day their *ch’i* becomes indolent; at dusk their *ch’i* is exhausted. Thus one who excels at employing the army avoids their ardent *ch’i*, and strikes when it is indolent or exhausted. This is the way to manipulate *ch’i*.”

Wu-tzu, for whom *ch’i* was one of the four vital points of warfare, believed it “ebbed and flourished,” and therefore also advised a policy directed to snatching away the enemy’s *ch’i*. Moreover, troops far from home, who are

physically tired and mentally exhausted, furnish easy opportunities that should be exploited. However, if the enemy remains vigorous and spirited, two other possibilities can be either awaited or created: doubt and fear. About the former the strategists constantly warned: “Of disasters that can befall an army none surpasses doubt.” Therefore, launching an attack when the enemy is beset by doubt, when the commanding general is puzzled, was suggested by virtually all of them.

Fear causes even greater paralysis in an enemy, rendering them easy prey. The T’ai Kung cited fear among the perceived opportunities for mounting an attack, advising that “taking advantage of their fright and fear is the means by which one can attack ten.” The *Ssu-ma Fa* similarly states: “Attack when they are truly afraid, avoid them when they display only minor fears.” Wu-tzu frequently suggested measures designed to harry and frighten enemy troops, advancing to strike them when they grew fearful.

Within this context the commanding general—and leaders confronted with disciplinary and motivational challenges in many realms—had to wrestle with the difficult question as to how to instill spirit and develop courage. While much of the military theorists’ motivational theory was founded upon the draconian implementation of rewards and punishments, a policy that essentially caused the soldiers to fear their own officers more deeply than the enemy, there were several other measures designed to stimulate their *ch’i*, their spirit, at the appropriate stages. Sun Pin’s chapter “Expanding *Ch’i*” provides the most systematic overview found in the extant ancient writings, even though the techniques themselves are lacking.

As background it should be noted that the *Ssu-ma Fa* expressly contrasted the basic, underlying attitude distinguishing the civil and martial spheres: the former is the realm of propriety and deference, whereas the latter is the realm of action and straightforwardness. Thus the true warrior’s demeanor radically differs, and his *ch’i* is

appropriately constrained. However, *ch'i* is explicitly understood to be a subject for manipulation, and there are appropriate techniques for raising it, for "when the heart's foundation is solid, a new surge of *ch'i* will bring victory."

The solution to the age-old question of what motivates individuals to fight in military engagements—or even to strive in their life roles and job functions—and measures to ensure that each man's effort is maximized, were founded upon the basic perception that courage, which is a manifestation and function of *ch'i*, is the key. Assuming that life under arms has instilled the basic discipline and attitude, fostering an intense commitment which will not admit any possibility but fighting to the death is then required. Two analytical illustrations found in the Military Classics vividly depict the nature of this commitment. In the earlier one, Wu Ch'i speaks about a "murderous villain":

Now if there is a murderous villain hidden in the woods, even though a thousand men pursue him they all look around like owls, and glance about like wolves. Why? They are afraid that violence will erupt and harm them personally. Thus one man oblivious to life and death can frighten a thousand.

Nearly two centuries later the *Wei Liao-tzu* echoed it:

If a warrior wields a sword to strike people in the market place, among ten thousand people there will not be anyone who doesn't avoid him. If I say that it's not that only one man is courageous, but that the ten thousand are unlike him, what is the reason? Being committed to dying and being committed to seeking life are not comparable.

Although the *Ssu-ma Fa* discusses numerous measures for stimulating and nurturing spirit and resolve, and the other Military Classics also offer scattered suggestions, only the *Wei Liao-tzu* briefly characterizes the idealized

progression of the soldiers' mental states as they advance into battle:

Soldiers have five defining commitments: for their general they forget their families; when they cross the border they forget their relatives; when they confront the enemy they forget themselves; when they are committed to die they will live; while urgently seeking victory is the lowest. A hundred men willing to suffer the pain of a blade can penetrate a line and cause chaos in a formation. A thousand men willing to suffer the pain of a blade can seize the enemy and kill its general. Ten thousand men willing to suffer the pain of a blade can traverse under Heaven at will.

Against this background which, although spanning nearly two centuries, outlines the common conceptions of motivation and *ch'i* in the ancient period, Sun Pin's chapter may be clearly interpreted. In the initial period when a campaign army is being formed and the troops assembled, an attitude of seriousness and constraint would be required. The soldiers' willing commitment, their initiative and voluntary participation, must be stimulated. As the other writings note, baleful omens, fears, and doubts must be prevented. However, unbridled courage would be equally disruptive, leading to excessive displays of bravado and a tendency to unruliness.

As the army advances into the field, "order," understood as military discipline and the strict governance of the army's hierarchical organization of responsive units, must be maintained. Simultaneously, the soldiers' anticipation and commitment should be made sharper. This sharpening might best be understood as nurturing their general enthusiasm and commitment to the military enterprise because it would be detrimental for their *ch'i* to become too "sharp." As the Taoists point out, what is too sharp will easily become blunted and broken, especially if such sharpness is not wielded in action.

Once the day for battle has been set a commitment to dying, the decisiveness described above, has to be created. All vestiges of fear must be eliminated, with the soldiers manifesting the desperate resolve that Sun-tzu elicits by thrusting them into hopeless situations. As the *Ssu-ma Fa* states: “When men have their minds set on victory, all they see is the enemy. When men have minds filled with fear, all they see is their fear.” (Or, much expanded in contemporary terms, people committed to their activities lack the leisure for doubt to affect them; they are too focused and absorbed to lose confidence or allow anxiety to paralyze them.)

Finally, when they enter battle focused on the grim task of dealing death and dying themselves— rather than simply being swept along by high-spirited enthusiasm—the general must “expand their *ch’i*.” Sun Pin’s analysis emphasizes this distinction between ebullient, unrealistic enthusiasm and the decisive, committed to “death as if returning home” attitude required as the foundation for violent combat. He apparently recognized the danger of bringing men to this ultimate point which, while absolutely necessary, may prove too brittle. Such fervency might be quickly dissipated by the initial moments of battle, perhaps following the first concerted thrust at the enemy, or even result in the sort of impulsive action which Wu Ch’i brutally condemned. Therefore the general’s final task is to expand their *ch’i* so that their courage will be sustained throughout the day’s conflict, rather than broken precipitously. It is perhaps a fundamental aspect of the “new surge of *ch’i*” that will bring victory already noted above.

Unfortunately, the details of Sun Pin’s methods have been lost; only glimpses remain. Rewards and punishments, made the foundation of the ruler’s and commander’s awesomeness in the Military Classics, are the basic tools for stimulating the troops. Their clothes, which clearly offered little protection against the cold and doubtlessly even less comfort, coupled with the general hardship of military service, clearly “honed” their *ch’i* just like a whetstone

sharpening a blade through slow grinding. Furthermore, issuing minimal rations would compel them to aggressively wrest needed supplies from the enemy, and they could not defer taking the initiative on the battlefield.

The dangers posed by any lack of courage have also been extensively noted above. Sun Pin points out that an absence of sharp *ch'i* results in defeat. When men are dispirited, they perform poorly and without vigor, presenting the enemy with an astounding opportunity. Furthermore, when their *ch'i* has not been honed, they are susceptible to becoming frightened and even an unperceptive enemy will rush to take advantage of the situation to terrify and attack them. The *Wei Liao-tzu* captured these two aspects: "Those from whom the initiative has been taken have no *ch'i*; those who are afraid are unable to mount a defense." Similarly, when other requisite *ch'i* states are not appropriately realized, disaster can be expected. As Sun Pin notes, when their *ch'i* is not decisive, they will easily be scattered by enemy pressure, whereas when they are lazy (probably because their *ch'i* is not stimulated), they will not respond to their orders. Being unresponsive, the troups will be impossible to command to initiate attacks or converge upon designated targets in accord with Sun Pin's basic doctrine of segmenting forces and Sun-tzu's principle of segmenting and reuniting to concentrate mass upon weak points. Finally, without constraint and proper measure the army will not only lack order and discipline but also wastefully dissipate its energy. Although unstated, the resulting inability to wage sustained battles will ultimately result in defeat.

The last paragraph gives evidence of Sun Pin's ascription of overarching stimulative power to the implementation of punishments. Clearly the members of each unit, whatever the level— although likely the squad of five was the basis— were bound by being mutually responsible for each other. Other works preserve regulations for a squad suffering the death of a member in battle; this chapter is unusual in

probably referring to the capture of a unit member or possibly the unit leader. Men were thus coerced into fervently fighting by what has probably been the prime motivation over the millennia, their relationship with their fellow soldiers. Although the military writings generally discuss this coercion in terms of the threat of capital punishment, sometimes supplemented by great rewards, many of the ancient thinkers also understood the power of shame in motivating men to fight. Further reinforcing the duress of personal punishment was the constant threat that an individual’s family, equally at risk, could suffer for his failure. Punishment incurred by battlefield transgressions could only be remitted through outstanding individual and squad performance in subsequent combat.

14
Offices, I

SUN-TZU SAID:

“In general, to command troops, make formations advantageous, and unify the mailed soldiers, you should establish offices as appropriate to the body. Implement orders with colored insignia; have the chariots carry pennants to distinguish the relationships of things; arrange the rows by squads; organize the troops by hamlets and neighborhoods; confer leadership in accord with the towns and villages; settle doubts with flags and pennons; disseminate orders with gongs and drums; unify the soldiers with tight marching; and form them into close order, shoulder to shoulder.

“To hunt down the enemy’s army use an elongated formation; labor and exhaust them by constraining and contravening them.

“To deploy the regiments use an endangering formation.

“Engage in arrow warfare with the Cloud Formation.

“Defend against and surround the enemy with an entangled, flowing formation.

“Seize the enemy’s fierce beak with a closing envelopment.

“Attack the already defeated by wrapping and seizing them.

“When racing to rescue an army employ a close formation.

“In fierce combat use alternated rows.

“Employ heavy troops in order to attack light troops.

“Employ light troops in order to attack the dispersed.

“When attacking mountain cliffs employ the ‘Arrayed Walls.’

“On expansive terrain employ a square formation.

“When you confront heights and deploy your forces, employ a piercing formation.

“For ravines, when pressed employ a circular formation.

“When engaged in combat on easy terrain, to effect a martial retreat employ your soldiers in a rear guard action.

“When your strategic power exceeds the enemy’s, when deploying to approach them employ a flanking attack on the wings.

“In ordinary warfare, when the short weapons clash employ a sharp piercing front.

“When the enemy is bottled up in a ravine, release the mouth in order to entice them farther away.

“Amidst grasses and heavy vegetation use *yang* (visible) pennants.

“After being victorious in battle, deploy in formation in order to rouse the state.

“To create awesomeness, deploy with mountains as the right wing.

“When the road is thorny and heavily overgrown, use a zigzag advance.

“To facilitate exhausting the enemy use the Awl Formation.

“In ravines and gullies use intermixed elements.

“When turning about and withdrawing use measures to entangle the enemy.

“When circumventing mountains and forests, use segmented units in succession.

“Attacking state capitals and towns with water will prove effective.

“For night withdrawals use clearly written bamboo strips.

“To maintain alertness at night use passes with counterauthorizations.

“To counter raiding forces that forcefully penetrate the interior use ‘Death Warriors.’

“To go against short weapons use long weapons and chariots.

“Use chariots to mount incendiary attacks on supplies under transport.

“To realize a sharp edged deployment use the Awl Formation.

“To deploy a small number of troops use united, intermixed forces; combining mixed forces is the means by which to resist being surrounded.

“Rectifying the ranks and systematizing the pennants are the means by which to bind the formations together.

“Breaking apart and intermixing like clouds are the means by which to create a tactical imbalance of power and explosive movement.

“Turbulent winds and shaking formations are the means by which to exploit doubts.

“Hidden plans and concealed deceptions are the means by which to inveigle the enemy into combat.

“Descending dragons, hidden power, and deployed ambushes are the means by which to fight in the mountains.

“Unusual movements and perverse actions are the means by which to crush the enemy at fords.

“Being unexpected and relying on suddenness are the means by which to conduct unfathomable warfare.

“Preventative ditches and circular formations are the means by which to engage a superior enemy in battle with a few troops.

“Spreading out the pennants and making the flags conspicuous are the means by which to cause doubt in the enemy.

“The Whirlwind Formation and swift chariots are the means by which to pursue a fleeing enemy.

“When under duress, shifting the army is the means by which to prepare for a strong enemy.

“The Floating Marsh Formation and flank attacks are the means by which to fight an enemy on a confined road.

“Slow movements and frequent avoidance are the means by which to entice an enemy to try to trample you.

“Zealous training and whirlwind alacrity are the means by which to counter piercing thrusts.

“Solid formations and massed battalions are the means to attack an enemy’s fiery strength.

“Analytically positioning fences and screens is the means by which to bedazzle and make the enemy doubtful.

“Deliberate tactical errors and minor losses are the means by which to bait the enemy.

“Creating heavily disadvantageous circumstances is the means by which to trouble and exhaust the enemy.

“Patrolling in detail and verbal challenges are the means by which to maintain security for the army at night.

“Numerous supply sources and dispersed provisions are the means to facilitate victory.

“The resolute are the means to defend against invasion.

“The various units moving in turn is the means by which to pass over bridges.

“Reckless withdrawals and roundabout entries are the means by which to release the army from difficulty.”

COMMENTARY

Among the thirty-one chapters of the *Military Methods,* “Offices, I” remains the most difficult to fathom and translate because—apart from the opening paragraph—it consists of a series of disparate pronouncements upon

concrete tactical principles, many with widely ranging implications and applications. While the strips themselves have not suffered extensive damage, much of the language is reasonably obscure and requires imaginative reconstruction. Over the past two decades analysts and the modern commentators have expended hundreds, perhaps thousands of hours upon the text, seeking out collateral passages and similarly illuminating phrases. Many of their suggestions have been incorporated in our translation; others, however, have been foregone in favor of a more direct interpretation of the sentences.

The tactical principles enumerated in “Offices, I” easily fall within the overall framework of Sun Pin’s *Military Methods* and are consistent with the measures proposed in other chapters. Perhaps the most significant question stems from the unusually large number of formations appearing in the chapter. Several commentators identify the various two character terms as in fact naming particularized formations rather than designating general characteristics. However, while some of them (such as the Cloud Formation) clearly belong to the former category, in general it must be doubted that armies could have mastered so many individual, complex formations. More likely, apart from the basic ones (such as square, circular, and so forth) and some particularized deployments designed to incorporate unique strengths, they refer to temporal ordering arrangements that a general might effect using his basic building blocks. However, because no other source or even combination of writings provides such an extensive list, the degree of tactical flexibility characterizing these ancient armies needs to studied.

As the scope of warfare evolved and the numbers of men thrown onto the battlefield increased dramatically, exerting effective control—a problem that also plagued Greek and Roman warfare for much of its history and saw many famous generals still leading their troops rather than being able to exercise command once a battle commenced—

became a critical issue. The answer in ancient China was organization, articulation, and an emphasis upon communication which made the flexible execution of tactics possible. The foundation was grouping the men into squads, companies, and armies according to a rigid hierarchical system. Thereafter, the key became identifying them and developing their sense of larger unit identity, for then they could be commanded to act as integral parts of greater organizations and effect suitable deployments. Insignia, mentioned in the first paragraph, thus identified the men and made the rapid execution of imaginative commands possible.

Insignia were associated with every level, from the lowest to the highest, including the dynastic houses of antiquity. Rank, armies, regiments, companies, and even squads would be individually distinguished by a combination of insignia, positioning of insignia, and flags or pennons for the officers. Emblems, flags, pennants, and insignia were not only intended to reflect order, but also to ensure it, and were numbered among the twelve essential matters identified by the *Wei Liao-tzu* as the Tao of certain victory: “The seventh, ‘five emblems,’ refers to distinguishing the rows with emblems so that the troops will not be disordered. The twelfth, ‘strong troops,’ refers to regulating the flags and preserving the units. Without the flags signaling an order, they do not move.”

Sun-tzu cited an earlier text on the origin of flags and drums—the two always being used in conjunction, although drums of course had to suffice at night—and discussed the immediate effect they have upon individual soldiers in “Military Combat.” When all the elements are appropriately synthesized and implemented, the actions of the individual soldier will be solely and explicitly directed by the flags and drums, creating the articulated maneuverability and essential unity needed to vanquish the enemy in combat.

The importance of flags, pennants, and drums cannot be overestimated. Accordingly, the commanding general

personally directed them and, contrary to normal expectation that the strongest men would be placed in the forefront of the fighting, the flags—whose manipulation could decide the fate of hundreds, if not thousands—were given priority. Naturally in every situation and at all times—whether on difficult terrain, in tall grass, or trudging along mountains—the flags had to be clearly visible.

15
Strengthening the Army

KING WEI ASKED SUN PIN:

"In instructing me how to strengthen the army none of the officers in Ch'i espouse the same Tao. Some instruct me about government; some instruct me about restraint in making impositions; and some instruct me to dispense provisions to the people. Some instruct me about tranquility, others about diverse practices. Among what they teach, what should I put into practice?"

Sun Pin replied: "None of them are urgent for strengthening the army."

King Wei said: "Then what is urgent for strengthening the army?"

Sun Pin said: "Enrich the state."

King Wei said: "How should I go about enriching the state?"

COMMENTARY

The topic of this severely fragmented chapter remains just visible in King Wei's question: how should Ch'i go about strengthening its army? His complaint about the divisive

approaches being suggested attests to the panoply of views espoused in the court, the result of his openness to exploring different disciplines in the avowed quest to discover strategic paradigms and essential programs critical to the state's survival. Of particular importance here is the focus of the king's interest—not simply administrative measures nor general approaches to government, but concrete steps that can be implemented to strengthen the army. Thus framed, every response is inevitably coerced into focusing on this crucial problem rather than enjoying the latitude to advise de-emphasizing the army to strengthen the state through the cultivation of virtue or similar practices. This topic of course fully accords with Sun Pin's discussion in the chapter entitled "Audience with King Wei" where he noted that the great moral paragons, suffering the encroachment of evildoers, were compelled to employ military force to impose order in the world, thereby emphasizing the innate nature of human conflict.

In King Wei's era, the middle of the fourth century B.C., proponents of Taoism, early Confucianism, Mohism, early Legalism, the Logicians, the agriculturalists, *yin-yang* and other naturalists, and the military thinkers were eagerly in evidence. Among the several thousand mendicant advisers in Ch'i, virtually every philosophical perspective and political doctrine could certainly be found. Numerous minor figures—emphasizing one aspect or another of government practice—also propounded their views in an attempt to influence the king and gain ministerial office. The Confucians would, in addition to emphasizing a rule of Virtue and the practice of righteousness, have advocated minimizing the impositions on the people and the welfare of the people. While Sun Pin's own views of course can be extrapolated from the principles found throughout the *Military Methods,* apart from this chapter and its emphasis upon "enriching the state," he never discussed such basic topics as the people's welfare.

Sun Pin's succinct reply to King Wei, "enrich the state," may be explicated in terms of the beliefs preserved in the

other late Warring States military writings. Fundamentally, the state needs to garner the willing allegiance of its populace in order to convert them into enthusiastic, well-trained soldiers capable of mounting a solid defense and defeating the enemy. Only a reasonably prosperous, satisfied, and well-ordered populace—one free of onerous labor services and excessive taxes—will be physically and emotionally capable of undertaking the hardships of military duty. Moreover, the state that focuses upon developing an adequate degree of material prosperity will be able to afford the vast expenditures and great waste of military campaigns, as well as the luxury of removing able-bodied males from the active farming population while they undergo training and serve for prolonged periods. In general, only benevolent governments that espouse such fundamental virtues as righteousness and sincerity, whose rulers cultivate Virtue and thereby develop personal charisma and power, will significantly affect the people, motivating those within the state to fight for it, and those without to emigrate into it, particularly if uncultivated lands are offered as incentives. The degree to which punishments rather than rewards might be emphasized varied among the theorists; however, the military thinkers believed in the strict implementation of rewards and punishments as well as the severe but impartial practice of law, in contrast to the Confucian emphasis upon personal morality. Organizational concepts such as the mutual guarantee system and the inescapable grouping by hamlets and villages held prominent places in their thought, and were the basis for the draconian implementation of punishments both in civil and military life.

16
Ten Deployments

IN GENERAL, there are ten deployments: square, circular, diffuse, concentrated, Awl, Wild Geese, hooked, Dark Rising, incendiary, and aquatic. Each of them has its advantages:

The square deployment is for cutting.

The circular deployment is for unifying.

The diffuse deployment is for rapid (flexible) response.

The concentrated deployment is to prevent being cut off and taken.

Deployment into the Awl Formation is for decisively severing the enemy.

Deployment into the Wild Geese Formation is for exchanging archery fire.

Deployment into the hooked formation is the means by which to change targets and alter plans.

The Dark Rising deployment is for causing doubts in the enemy's masses and difficulty for his plans.

The incendiary deployment is the means to seize enemy encampments.

The aquatic deployment is the means to inundate the solid.

The tactics for square deployment: You must thin out the troops in the middle and make those on the sides thicker.

The reserve (ready response) formations are at the rear. By thinning out the middle the general can effect a rapid response. By expanding and making the sides heavy, the general can cut the enemy. Retaining the reserves in the rear is the means by which to react quickly.

The tactics for diffuse deployment: Armor is scarce and men are few. For this reason make it firm. Martial prowess lies in the flags and pennants; showing large numbers of men lies in your weapons. Thus the soldiers must disperse and maintain their internal separation. Make the flags, banners, and feathered pennants numerous; sharpen your blades to act as your flanks. For them not to be compressed by the enemy when diffuse, or surrounded when concentrated, lies in exercising great care. The chariots do not race, the infantry does not run. The tactics for diffuse deployment lie in creating numerous small operational units. Some advance, others retreat. Some attack, others hold and defend. Some launch frontal assaults, others press their developing weaknesses. Thus the diffuse deployment is able to seize the enemy's elite forces.

The tactics for concentrated deployment: Do not augment the spacing between the men. When they are compressed, gather your blades at the head of the formation and then extend it forward while the front and rear mutually preserve each other. Amidst the changes of battle do not alter it. If the mailed soldiers are afraid, have them sit. Use sound to direct them to sit and arise. Do not dispatch any forces after enemy troops that go off; do not stop those who come forth. Some of our troops should attack their circuitous routes of approach, others should "insult" their elite troops. Make them as dense as feather down without any gaps; when they turn about and retreat they should be like a mountain. Then the concentrated deployment cannot be taken.

Deployment into the Awl Formation should be like a sword. If the tip is not sharp it will not penetrate; if the blade is not thin it will not cut; if the foundation is not thick you

cannot deploy the formation. For this reason the tip must be sharp, the blade must be thin, and the foundation must be substantial. Only then can a deployment into the Awl Formation decisively sever the enemy.

Deployment into the Wild Geese Formation: The front ranks should be like a baboon, the rear ranks should be like a wildcat. Attack from three sides, not letting the enemy escape your net to preserve themselves. This is referred to as the function of the Wild Geese deployment.

When deployed into the hooked formation, the front ranks must be square, while those conjoined on the left and right must be hooked. When the three sounds (of the drums, gongs, and pipes) are already complete, flags in the five colors must be prepared. When the sounds of our commands are clearly discriminated and the troops all know the five flags, there is no front or rear, no above or below.

In the Dark Rising deployment you must make the flags, pennants, and feathered banners numerous; the drums should be integrated and resounding. If the mailed troops are confused have them sit; if the chariots are disordered array them in rows. When they have been ordered, the infantry should come forth with a great pounding and tumult, as if descending from Heaven, as if coming out from Earth, and be unwavering. Throughout the day they will not be taken. This is referred to as the Dark Rising deployment.

The tactics for incendiary warfare: when your ditches and ramparts have already been completed, construct another outer ring of ditches and moats. Every five paces pile up firewood, being certain to equalize the quantities in each pile. A designated number of attendants should be assigned to them. Order men to make linked *chevaux-defrise;* they must be light and sharp. If it is windy, [avoid positions downwind or igniting fires in camp. Once the engagement commences] if the vapors from a fire overspread you and you are unable to conquer the enemy, stand down and retreat.

The tactics for incendiary warfare: if the enemy is downwind in an area abundant with dry grass where the soldiers of their Three Armies will not have anywhere to escape, then you can mount an incendiary attack. When there is a frigid fierce wind, abundant vegetation and undergrowth, and firewood and grass for fuel already piled up, while their earthworks have not yet been prepared, in such circumstances you can mount an incendiary attack. Use the flames to confuse them, loose arrows like rain. Beat the drums and set up a clamor to motivate your soldiers. Assist the attack with strategic power. These are the tactics for incendiary warfare.

The tactics for (defensive) aquatic warfare: You must make the infantry numerous and the chariots few. Command them to fully pre- pare all the necessary equipment, such as hooks, repelling poles, cypress wood, pestles, light boats, oars, baskets, and sails. When advancing, you must follow close on; when withdrawing do not press together. When mounting a flank attack follow the current’s flow, taking their men as the target.

The tactics for (aggressive) aquatic warfare: nimble boats should be used as flags, swift boats should be used as messengers. When the enemy goes off pursue them; when the enemy comes forth press them. Resist or yield as appropriate, and in accord with the situation organize against them. When they shift their forces make them change their plans; when they are deploying, strike them; when they are properly assembled, separate them. Accordingly, the weapons include spades and the chariots have defensive infantry. You must investigate their numerical strength as many or few, strike their boats, seize the fords, and show the people that the infantry is coming.

These are the tactics for aquatic warfare.

COMMENTARY

This chapter again considers the critical question of deployments, the essence of any successful military engagement. Among the pre-Ch'in *Seven Military Classics* the square and round formations are frequently mentioned, almost always in tandem, but none of the others appear until the T'ang dynasty *Questions and Replies* where the "square, round, curved, straight, and angular dispositions" are briefly discussed for training the troops. In addition, the first book of the *Questions and Replies* analyzes the nature of formations and debunks the origin of the names appended to the well known "eight formations"—Heaven, Earth, wind, cloud, dragon, tiger, bird, and snake. This set of formations is generally, although without critical basis, considered to be the oldest series, its creation being attributed to the Yellow Emperor. Insofar as popular tradition commonly acclaims the Yellow Emperor as the progenitor of Chinese military history because of his epoch-making battles with the Red Emperor and Ch'ih Yu, this would project them well back into the mists of antiquity.

Furthermore, the great achievements of outstanding historical generals such as Wu Ch'i and Sun-tzu are sometimes said to have been made possible through their mastery of these formations. However, another series of eight is also well known: square, round, female, male, striking, Wheel, Floating Obstacle, and Wild Geese arrays. Over the centuries various diagrams have been created to characterize them but most seem incongruous, merely the products of imagination.

The Awl and Wild Geese formations have already been encountered in Chapter 3, "Questions of King Wei," while Chapter 7, entitled "Eight Formations," discussed in general terms the principles governing the constitution and deployment of all formations, such as creating a sharp front and maintaining adequate reserves. Unfortunately, the

present chapter offers only a few salient characteristics for each of the suggestive names rather than itemizing the constituent elements and clearly characterizing the deployment's shape. No doubt they were well known to the ancients, allowing Sun Pin to merely emphasize certain critical aspects. Only the Awl Formation is particularly clear, while the sword analogy was previously employed in Chapter 9. The contrast between the diffuse and dense deployments merits noting, with the attendant problems of preventing the former from becoming compressed and the later from being too dense and therefore disorganized. Certainly the diffuse deployment's main advantage should be its mobility and quick responsiveness because small units can move freely—especially across fairly open internal terrain—whereas heavy ones, having great inertia, require both time and extensive logistical support. Unmentioned are the dangers of being penetrated by a concentrated enemy force—perhaps in the Awl Formation—or small units encountering superior forces that may simply overwhelm them. However, some tactics for responding to such situations, as well as for attacking them, are found in the next chapter and scattered throughout the book.

In Chapter 12, "Incendiary Attacks," Sun-tzu discussed employing fire to realize tactical objectives. Apparently he felt incendiary attacks could facilitate the capture of fortified positions, whereas water could not: "Using fire to aid an attack is enlightened, using water to assist an attack is powerful. Water can be used to sever, but cannot be employed to seize." Unfortunately, he never described the formations for mounting incendiary attacks, nor are any indicated in the other *Seven Military Classics.* Furthermore, only a few measures essential to defending against incendiary attacks are noted in the *Six Secret Teachings,* mainly setting backfires and then occupying the scorched but viable ground with a strong, defensive array.

Just as with incendiary tactics, those for defensive and aggressive aquatic engagements are analyzed separately.

Moreover, rather than being directed just toward naval engagements between boats, they focus upon defending against amphibious attacks and even inundation, which accounts for the odd admixture of tools and materials. The assault tactics encompass not only engaging the enemy on the water, but also simultaneously thwarting his attack. Remarkably, despite an extensive history of combat in the Spring and Autumn period among states with numerous rivers, lakes, and marshes, tactics for “water warfare” receive scant attention in the extant early military writings. This perhaps stemmed from the chariot-based nature of early tactics and the consequent predilection to view bodies of water as entanglements and obstacles to be vigorously avoided.

17
Ten Questions

INQUIRING ABOUT THE MILITARY :

“Suppose our army encounters the enemy and both establish encampments. The provisions and foodstuffs for both sides are equal and ample; our men and arms balanced with the enemy’s; while both ‘guest’ (the invader) and ‘host’ (the defender) are afraid. If the enemy has deployed in a circular formation in order to await us and relies upon it for his solidity, how should we strike them?”

“To strike them, the masses of our Three Armies should be divided to comprise four or five operational groups. Some of them should assault them and then feign retreat, displaying fear to them. When they see we are afraid, they will divide up their forces and pursue us with abandon, thereby confusing and destroying their solidity. The four drums should rise up in unison, our five operational forces should all attack together. When all five arrive simultaneously, the Three Armies will be united in their sharpness. This is the Tao for striking a circular formation.”

“Suppose our army encounters the enemy and both establish encampments. The enemy is rich while we are poor; the enemy is numerous while we are few; the enemy is strong while we are weak. If they approach in a square formation, how should we strike them?” “

To strike them deploy in the diffuse formation and fragment them; if they are properly assembled, separate them; engage them in battle and then feign retreat; and kill the general for their rear guard without letting them become aware of it. This is the Tao for striking a square formation.”

“Suppose our army encounters the enemy and both establish encampments. If the enemy’s troops are already numerous and strong; muscular, agile, and resolute; and have deployed into a sharp formation in order to await us, how should we strike them?”

“To strike them you must segment into three operational groups to separate them. One should be stretched out horizontally, two should go off to strike their flanks. Their upper ranks will be afraid and their lower ranks confused. When the lower and upper ranks are already in chaos, their Three Armies will then be severely defeated. This is the Tao for striking a sharp deployment.”

“Suppose our army encounters the enemy and both establish encampments. The enemy is already numerous and strong, and have assumed an extended horizontal deployment. We have deployed and await them, but our men are few and incapable of withstanding them. How should we strike them?”

“To strike them you must segment our soldiers into three operational groups and select the ‘death warriors.’ Two groups should be deployed in an extended array with long flanks; one should consist of talented officers and selected troops. They should assemble to strike at the enemy’s critical point. This is the Tao for killing their general and striking horizontal deployments.”

“Suppose our army encounters the enemy and both establish encampments. Our men and weapons are numerous but our chariots and cavalry are few. If the enemy’s men are ten times ours, how should we attack them?”

“To attack them you should conceal yourselves in the ravines and take the defiles as your base, being careful to avoid broad, easy terrain. This is because easy terrain is advantageous for chariots while ravines are advantageous to infantry. This is the Tao for striking chariots in such circumstances.”

“Suppose our army encounters the enemy and both establish encampments. Our chariots and cavalry are numerous, but our men and weapons are few. If the enemy’s men are ten times ours, how should we attack them?”

“To attack them carefully avoid ravines and narrows; break open a route and lead them, coercing them toward easy terrain. Even though the enemy is ten times more numerous, easy terrain will be conducive to our chariots and cavalry, and our Three Armies can attack. This is the Tao for striking infantry.”

“Suppose our army encounters the enemy and both establish encampments. Our provisions and food supplies have been disrupted. Our infantry and weapons are inadequate to be relied upon. If we abandon our base and attack, the enemy’s men are ten times ours. How should we strike them?”

“To strike them when the enemy’s men have already deployed into and are defending the narrows, we should not enter the ravine but turn about and inflict damage upon their vacuities. This is the Tao for striking an enemy on contentious terrain.”

“Suppose our army encounters the enemy and both establish encampments. The enemy’s generals are courageous and difficult to frighten. Their weapons are strong, their men numerous and selfreliant. All the warriors of their Three Armies are courageous and untroubled. Their generals are awesome; their soldiers are martial; their officers strong; and their provisions well supplied. None of the feudal lords dares contend with them. How should we strike them?”

“To strike them announce that you do not dare fight. Show them that you are incapable; sit about submissively and await them in order to make their thoughts arrogant and apparently accord with their ambitions. Do not let them recognize your ploy. Thereupon strike where unexpected; attack where they do not defend; apply pressure where they are indolent; and attack their doubts. Being both haughty and martial, when their Three Armies break camp the front and rear will not look at each other. Therefore strike their middle just as if you had the infantry strength to do it. This is the Tao for striking a strong, numerous foe.”

“Suppose our army encounters the enemy and both establish encampments. The enemy’s men have concealed themselves in the mountains and taken the passes as their base. Our distant forces cannot engage them in battle, but nearby we have no foothold. How should we strike them?”

“To strike them you must force them to move from some of the passes they have taken onto easy terrain and then they will be endangered. Attack positions that they must rescue. Force them to leave their strongholds in order to analyze their tactical thinking and then set up ambushes and establish support forces. Strike their masses when they are in movement. This is the Tao for striking those concealed in strongholds.”

“Suppose our army encounters the enemy and both ‘guest’ and ‘host’ have deployed. The disposition of the enemy’s men is like a woven, flat basket. If I estimate the enemy’s intentions, they seem to want us to penetrate their lines and be overwhelmed. How should we strike them?”

“To strike them the thirsty should not drink, the hungry should not eat. Segment into three operational groups and employ two to assemble and strike their critical point. When the enemy has already initiated a response toward the middle, our talented officers and selected soldiers should then strike their two flanks. In this fashion their Three Armies will be severely defeated. This is the Tao for striking basket-like deployments.”

COMMENTARY

In “Ten Questions” an unknown interlocutor, perhaps King Wei or even Sun Pin himself, describes a series of ten

possible battlefield situations for which an unidentified source—presumably Sun Pin—provides appropriate tactical solutions. Consequently, this chapter falls into the analytical tradition initiated in the *Art of War* and found extensively embodied in the *Wu-tzu* and *Six Secret Teachings,* with many of these hypothetical problems being similar or even identical to those resolved in various other writings. However, certain principles germane to Sun Pin's thought dominate the ten theoretical responses. Most of the situations raised pose difficulties because the "enemy" force is invariably stronger, better equipped, or well entrenched, while the interlocutor's solution force may suffer from additional, pronounced handicaps such as disproportionately fewer chariots, cavalry, or infantry. Sun Pin's suggested resolutions inherently depend upon two principles: divide your forces into operational units and manipulate the enemy. Examples of the former have already been seen in the earlier chapters, and are particularly characteristic of his thought.

In general, Sun Pin apparently believed it would be extremely difficult for an opponent to observe, anticipate, counter, and then successfully neutralize several simultaneous threats. Naturally the sudden appearance of segmented forces in several locations or descending from several directions would rend the enemy's hard forged unity, compound his logistical problems, and disrupt his command structure. A well planned effort could then take advantage of the confusion and resulting fragmentation of forces to wrest victory in whole or part, particularly by rapidly focusing the combined power of the operationally segmented units at one point. This approach of course adheres to Sun-tzu's basic dictum: "If they are united cause them to be separated. If we are concentrated into a single force while he is fragmented into ten, then we attack him with ten times his strength. The army is established by deceit, moves for advantage, and changes through segmenting and reuniting."

The second principle underlying Sun Pin's tactics is simply "manipulate the enemy." This was also one of Sun-tzu's fundamental doctrines, thoroughly implemented by the tactics found throughout the *Art of War,* but especially in the chapter entitled "Vacuity and Substance." In summary Sun-tzu said: "One who excels at warfare compels men and is not compelled by other men." Even the methods suggested in this chapter for manipulating the enemy are found in the *Art of War* as well as the other works mentioned above. In particular, the enemy's alertness should be undermined by feigning weakness, retreats, and general submissiveness or stupefied inaction. Measures designed to disorder their forces or command structure should also be employed before swiftly attacking, while headlong attacks and battles of attrition should always be avoided. Whenever the enemy is ensconced in strongpoints or has otherwise exploited the natural advantages of terrain, they must be moved onto more favorable ground—whether through temptation or a threat to one of their critical positions. Outnumbered forces should avail themselves of ravines and confined spaces, as Suntzu and virtually every other thinker advocated, while those possessing great superiority in men and especially chariots should engage the enemy on "easy" terrain, open spaces where mobility will allow superior numbers to concentrate mass appropriately. Only then will the army have a reasonable chance of victory.

This chapter also has considerable historical importance insofar as it discusses the problems of disproportionate and imbalanced component forces. Given that the cavalry only became an integral part of Warring States armies early in the third century B.C., and probably tactically significant only late in the Warring States period (near the end of the third century), "Ten Questions" must have either been penned by a late disciple or the role of cavalry in Sun Pin's time has to be considerably revised.

18
Regulating Mailed Troops

Fragments

“If you want to engage in battle, act as if deranged.”

“Select your troops in accord with (the situation).”

“When the left and right flanks attack by rapidly converging, this is termed a ‘sharp hooking strike.’

“If you entice them far off, the enemy will roll up their armor to race forward.”

“Control and isolate their general, rattle his mind, and then strike.”

COMMENTARY

This chapter is so badly fragmented that most editions do not even include it, while the others fail to provide any notes. Among the twenty or so partial sentences, only the five salvaged above can be abstracted. However, the first is remarkable, not otherwise seen in the early military writings.

19
Distinction Between Guest and Host

ARMIES ARE DISTINGUISHED as being “guests” or “hosts.” The guest’s forces are comparatively numerous, the host’s forces comparatively few. Only if the guest is double and the host half can they contend as enemies.

The host establishes his position first, the guest establishes his position afterward. The host ensconces himself on the terrain and relies on his strategic power to await the guest who contravenes mountain passes and traverses ravines to arrive. Now if they contravene mountain passes and traverse ravines only to retreat and thereby dare to cut their own throats rather than advancing and daring to resist the enemy, what is the reason? It is because their strategic configuration of power is not conducive to attacking and the terrain is not advantageous.

If their strategic power is conducive and the terrain advantageous, then the people will advance by themselves. If their strategic power is not conducive and the terrain not advantageous, the people will retreat by themselves. Those who are referred to as excelling in warfare make their strategic power conducive and the terrain advantageous.

If the mailed troops are counted by the hundreds of thousands, while the people have a surplus of grain that

they are unable to eat, they have an excess. If the number of troops dwelling in a state is numerous, but the number employed is few, then the standing forces are excessive and those employed in combat insufficient. If several hundred thousand mailed soldiers go forth a thousand by a thousand, continuing on thousands after thousands, tens of thousands are thereby dispatched toward us. Those who are referred to as excelling at warfare excel at cutting and severing them, just as if a hand happened to wipe them away. One who can divide up the enemy's soldiers, who can repress the enemy's soldiers, will have enough men even with the smallest amounts. One who cannot divide up the enemy's soldiers, who can not repress the enemy's soldiers, will be insufficient even if several times more numerous.

Is it that the more numerous will be victorious? Then calculate the numbers and engage in battle. Is it that the richest will win? Then measure the grain supplies and engage in battle. Is it that the sharpest weapons and stoutest armor will win? Then it will be easy to foretell victory. Since this is not the case, the rich still do not dwell in security; the poor do not yet dwell in danger; the numerous have not yet attained victory; the few are not yet defeated. Now what determines victory or defeat, security or danger, is the Tao.

If the enemy's men are more numerous but you can cause them to become divided and unable to rescue each other; those under attack unable to know about each other; deep moats and high fortifications unable to be taken as secure; stout armor and sharp weapons unable to be taken as strength; and courageous, strong warriors unable to protect their general, then your victory will have realized the Tao. Thus enlightened rulers and generals who know the Tao will certainly first calculate whether they can attain success before the battle, so they will not lose any opportunity for achievement after engaging in battle. Thus if, when the army goes forth it achieves success, while when it returns it

is unharmed, the commander is enlightened about military affairs.

[If the enemy is robust and martial], make them tired. If the Three Armies' warriors can be forced to completely lose their determination, victory can be attained and maintained. For this reason repress the left while you hit the right; then when the right is being defeated the left will not be able to rescue them. Repress the right while you hit the left; then when the left is being defeated the right will not be able to rescue them. For this reason if the army sits about and does not get up, if they avoid battle and are not employed, those close by being few and inadequate for employment, while the distant are dispersed and incapable, [they are exhausted and dispirited and should be attacked].

Fragments

The *Tactics* states: "The host counters the guest at the border."

When a guest loves to engage in combat, he will certainly be defeated.

COMMENTARY

This chapter introduces the interesting distinction of "guest" and "host," the former generally referring to an invader, the latter to a defender normally fighting on his home territory or territory he already occupies. These two terms are not otherwise found in the early military classics, but figure prominently in later thought and general writings which make it clear that the distinctions are not invariant. The concept of a "guest" is not delimited solely to invaders moving into foreign territory, but may be considered another comparative tactical designation because it

essentially refers to a force in movement striking one already emplaced. Throughout history defensive forces have generally realized often insurmountable advantages through choosing the battlefield, exploiting the terrain, and establishing fortifications, forcing their “guests” to possess overwhelming superiority in firepower or numbers, as Sun Pin indicates, to even create the possibility of victory. Naturally the number of soldiers brought to bear and the sequence of their arrival will determine the nature and course of the conflict. Although cities were developing economically and proliferating, even in Sun Pin’s era the countryside was still fairly open and armies could range for some distance before encountering a stronghold. It would be possible to choose, even if less freely than in the Spring and Autumn period, sparsely populated routes in accord with Sun-tzu’s dictums. Therefore, despite the onset of wall construction, even within their own states defenders would be compelled to dispatch troops to counter invaders rather than rely upon heavy static defenses.

“Distinction Between Guest and Host” also reiterates the fundamental principle well discussed in previous chapters that victory can be wrought through fragmenting the enemy’s forces. Similarly, the importance of ravines for defense is tangentially evident in this chapter, for Sun Pin cites them to emphasize the difficulty of the invader’s advance and his courage in the face of such obstacles.

Two other concepts are critical, the Tao and strategic power. In this chapter “Tao” primarily refers to the Tao of warfare, although the ruler must also be concerned with the Tao of government. Sun Pin previously said: “The army’s power lies in the Tao” and “If one has realized the Tao even though the enemy wants to live they cannot.” Furthermore, in concord with other thinkers, he believed that “only a general who knows the Tao is capable.” Wu Ch’i constantly spoke of the Tao of warfare, while Sun-tzu placed the Tao first among his critical factors in the opening chapter, “Initial Estimations.” The role of strategic power, a concept

prominently identified with Sun-tzu, has already been characterized by Sun Pin as “the means by which to cause the soldiers to inevitably fight.” His view echoes Sun-tzu’s earlier statement, “One who excels at warfare seeks victory through the strategic configuration of power, not from reliance upon men.” When there is an imbalance in strategic power, it is easy to prevail; moreover the soldiers, realizing their advantages, are motivated to risk the dangers required to wrest victory. Apparently by Sun Pin’s time the absence of strategic advantages would find the soldiers preferring disgrace, punishment, and even death to uselessly advancing against the enemy.

Finally, the chapter elaborates a principle only glimpsed in Sun-tzu’s *Art of War*—the ability of outnumbered and comparatively impoverished forces to sustain the battle and even gain victory though such techniques as dividing and segmenting. Sun-tzu generally advocated avoiding such battles in favor of assuming a defensive posture except in one critical paragraph: “The army does not esteem the number of troops being more numerous for it only means you cannot aggressively advance. It is sufficient for you to muster your own strength, analyze the enemy, and take them. Only someone who lacks strategic planning and slights an enemy will inevitably be captured by others.” Sun-tzu’s method for engaging a superior foe consisted of fragmenting the enemy’s forces, keeping him ignorant, and forcing him to defend across an extremely broad front, thereby turning their many into a few and the outnumbered few into many. Similar situations in other realms continue to demand exactly these tactics.

20
Those Who Excel

THOSE WHO EXCEL IN WARFARE, even when the enemy's forces are strong and numerous, can force them to divide and separate, to be unable to rescue each other, and suffer enemy attacks without mutually knowing about it. Thus ditches that are deep and ramparts that are high will be unable to provide security; chariots that are sturdy and weapons that are sharp unable to create awesomeness; and warriors of courage and strength unable to make one strong. Those who excel in warfare control the ravines and evaluate the narrows, incite the Three Armies, and take advantage of contracting and expanding. Enemy troops that are numerous they can make few. Armies fully supplied and well provisioned they can make hungry. Those securely emplaced, unmoving, they can cause to become tired. Those who have gained All under Heaven they can cause to become estranged. When the Three Armies are united, they can cause them to become rancorous.

Thus the army has four roads and five movements. Advancing is a road, withdrawing is a road, left is a road, right is a road. Advancing is a movement, withdrawing is a movement, left is a movement, right is a movement. Silently emplaced is also a movement. For someone to excel these

four roads must be penetrating, these five movements must be skillful.

Thus when advancing he cannot be contravened to the fore, when withdrawing he cannot be cut off to the rear. To the left and right he cannot be forced into ravines. Silently remaining in position he can not be troubled by the enemy's men.

Accordingly, he causes the enemy's four roads to be impoverished, his five movements to be invariably troubled. If the enemy advances he will be pressed to the fore; if he withdraws he will be cut off to the rear. To the left and right he will be forced into ravines, while if he remains quietly encamped his army will not avoid misfortune.

Those who excel in warfare can cause the enemy to roll up his armor and race far off; to travel two days normal distance at a time;

to be exhausted and sick but unable to rest; to be hungry and thirsty but unable to eat. An enemy emaciated in this way certainly will not be victorious! Sated, we await his hunger; resting in our emplacement we await his fatigue; in true tranquility we await his movement. Thus our people know about advancing but not about withdrawing. They will trample on naked blades and not turn their heels.

COMMENTARY

This is perhaps the most lucid chapter in the entire work, focusing entirely upon the commander's ability to manipulate the enemy and thereby realize the conditions for victory. The tactical principles essentially derive from Sun-tzu's concepts of maneuver warfare, requiring mastery of command and control while stressing the implementation of measures to debilitate the enemy both physically and morally. In "Nine Terrains" Sun-tzu states: "In antiquity those

who were referred to as excelling in the employment of the army were able to keep the enemy's forward and rear forces from connecting; the many and few from relying on each other; the noble and lowly from coming to each other's rescue; the upper and lower ranks from trusting each other; the troops to be separated, unable to reassemble, or when assembled, not to be well-ordered. They moved when it was advantageous, halted when it was not advantageous."

The skills required are of course symmetrical: concrete tactics designed to compel the enemy must not, on the contrary, be successfully applied by the enemy. Every effort must be made to thwart the enemy's movements, coercing them into ineffectual and enervating activities, while preserving the army's strength and ensuring it remains free from maneuver constraints. Only then will the commander excel and his army prove consistently victorious.

21
Five Names, Five Respects

五名五恭

ARMIES HAVE FIVE NAMES :

The first is Awesomely Strong, the second Loftily Arrogant, the third Firmly Unbending, the fourth Fearfully Suspicious, and the fifth Doubly Soft.

In the case of the Awesomely Strong army, be pliant and soft and await them.

In the case of the Loftily Arrogant army, be respectful and outlast them.

In the case of the Firmly Unbending army, entice and then seize them.

In the case of the Fearfully Suspicious army, press them to the fore; set up a clamor on the flanks; deepen your moats and increase the height of your fortifications; and cause difficulty for their supplies.

In the case of the Doubly Soft army, set up a clamor to terrorize them, shake and disrupt them. If they go forth then strike them. If they do not go forth, surround them.

Such are the five names.

Armies have five manifestations of “respect” and five of “brutality.”

What is meant by the five manifestations of respect?

When it crosses the enemy’s border and is respectful, the army loses its normality.

If it acts respectfully twice, the army will not have anywhere to forage.

If it acts respectfully three times, the army will lose its appropriate affairs.

If it acts respectfully four times, the army will not have any food.

If it acts respectfully five times, the army will not attain its objective. Such are the five respects.

When it crosses the border and acts brutally, the army is referred to as a guest.

If it acts brutally twice, it is termed glorious.

If it acts brutally three times, the host’s men are afraid.

If it acts brutally four times, the troops and officers have been deceived.

If it acts brutally five times, the soldiers invariably have been greatly wasted.

The five respects and five brutalities must be mutually implemented.

COMMENTARY

The early military writings occasionally appended succinct, poignant names to various types of armies, often coupled with suggested means for confronting and defeating them. This practice mirrored similar evaluations found in the painfully real world of statecraft and political diplomacy, for enemies of both types had to be first characterized and analyzed before tactics for manipulating them might be evolved.

Orthodox theory in both the early military classics and Confucian writers stressed that warfare was a righteous activity, not to be undertaken lightly, and then only when compelled by self-preservation or to extirpate the evil. Naturally, determining whether military action might be

necessary was fundamentally affected by the analyst's mindset and strategic interests. Consequently, just as in twentieth-century history, perceived threats were frequently cited to justify preemptive action. However, apart from those Legalists who viewed warfare as the necessary means for enlarging the state and augmenting its wealth and power, most thinkers interpreted military activities from within a reasonably benign framework. Sun-tzu himself was a strong proponent of avoiding frequent, prolonged military actions because they would debilitate the state, and Sun Pin's era, although far more precarious, generally accorded nominal respect to proper motives. However, perhaps because he lived in an age of ever escalating warfare, Sun Pin's tactics for defeating the five different armies are more engagement oriented than a more abstract, largely verbal set formulated by Wu Ch'i just at the start of the era.

The second part of the chapter, which may have originally been separate, characterizes an invading army's behavior in terms of two fundamental modes of action: "respectful" (or constrained) versus cruel and "brutal." Naturally the latter was normally associated with invading forces and was inescapably witnessed in the massively destructive Warring States period. However, the perspective prevailing in Sun Pin's era (or somewhat thereafter when this book may have been compiled) still retained vestiges of earlier conceptualizations and values. To conquer, an invading army had to manifest a severe, fearful image and act decisively, with strength. The frequent warnings found in later Warring States works against rampaging, plundering, and wantonly destroying the countryside no doubt reflect reactions against excesses that, while effectively striking terror and possibly cowering foes into rapid submission, increased hatreds and hardened resistance. In contrast, Sun Pin's analysis emphasizes that being "respectful" provokes disaster and thus marks a weak, incapable army, whereas brutality, if not carried to extremes, proves effective as well as expected.

Concretely, when the army crosses the border it must act strongly and is accordingly termed a “guest,” the normal designation. Manifesting brutal behavior a second time makes it “glorious.” A third time and everyone in the defender’s territory is terrified. However, exceeding three such expressions of violence creates difficulties. The soldiers, by then no doubt exhausted, feel deceived, perhaps having expected a much simpler mission. (This would be particularly true when, contrary to propaganda, the campaign meets with determined resistance from the populace rather than merely being directed against a corrupt, hated ruler as in the famous case of King Wu vanquishing the depraved Shang.) A fifth time and their strength is finished, their efforts wasted. Of course victory in battle and “brutality” are not necessarily synonymous, nor is the range of behavior encompassed by Sun Pin’s employment of the term otherwise indicated. However, the closing remark—which asserts that respect and brutality need to be balanced and implemented in tandem—is somewhat problematic because this chapter essentially condemns all the manifestations of respect, as well as too frequently repeated acts of brutality. Therefore the conclusion is suspect; perhaps the words “five” appear incorrectly.

22
The Army’s Losses

IF YOU WANT TO EMPLOY that in which the enemy’s people are not secure, you should rectify the customs with which you govern the state.

If you want to strengthen and augment the shortcomings in your state’s army in order to cause difficulty for the enemy’s army in what he is strong, it will be a wasted army.

If you want to strengthen and multiply that in which your state has a paucity in order to respond to that in which the enemy is numerous, it will be a rapidly subjugated army.

If your preparations and strongholds are unable to cause difficulty for the enemy’s assault equipment, it will be an “insulted” army.

If your assault equipment is not effective against the enemy’s preparations and strongholds, it will be a frustrated army.

If someone excels at deployments, knows the appropriate orientations for forward and rear, and knows the configuration of the terrain, but yet the army frequently suffers difficulty, he is not enlightened about the distinction between states conquering and armies conquering.

If after mobilizing an army cannot flourish great achievements, it is because it does not know about assembling.

If an army loses the people, it does not know about excess.

If an army employs great force but the achievements are small, it does not understand time.

An army that is unable to overcome great adversity is unable to unite the people’s minds.

An army that frequently suffers from regret trusts the doubtful.

An army that is unable to discern good fortune and misfortune in the as-yet-unformed does not understand preparations.

When the army sees the good but is dilatory; when the time comes but it is doubtful; when it expels perversity but is unable to dwell in the results, this is the Tao of stopping.

To be lustful yet scrupulous; to be a dragon yet respectful; to be weak yet strong; to be pliant yet firm, this is the Tao of arising.

If you implement the Tao of stopping, then even Heaven and Earth will not be able to make you flourish. If you implement the Tao of arising, then even Heaven and Earth will not be able to obstruct you.

Fragments

When an army is internally exhausted, even numerous expenditures of energy will not result in solidity.

When you see the enemy is difficult to subdue, if the army still acts wantonly between Heaven and Earth, it will be swiftly defeated.

COMMENTARY

This chapter is the first of four consisting of collected observations on the strengths and errors of the military and generals such as are commonly found in the early military writings. Two topics here—the vital importance of the critical moment and the coupled concepts of the hard and soft, firm and pliable—particularly merit noting. The military writings, including Sun Pin's work, emphasize the concept of "timeliness" and consistently stress the need to recognize and exploit the fleeting moment for initiating action. Striking at the precise moment is so critical that any force that fails to recognize and exploit an opportunity may immediately become just as vulnerable as if it suffered from other fundamentally disabling conditions such as hunger or fatigue.

The other concept prominently found in this chapter is the inherently dynamic concept of the hard and the soft, the firm and the pliable (or flexible). Although they are coupled with two other paired conditions, it is these two which command attention. Sun Pin's era witnessed the growth of Taoist thought and its evolution into different perspectives, including eventually the so-called "Huang-Lao" school. The core text underlying much of Taoist philosophy is the famous *Tao Te Ching* in which the importance of the soft and pliable is advanced, subtly juxtaposed with normal world views which expect the hard to dominate the soft, the strong to brutalize the weak, and predicate actions accordingly. Portions of two sections are particularly illuminating:

Alive man is pliable and weak,
Dead he is firm and strong.
Alive the myriad things, grasses, and trees are pliable and fragile;
Dead they are dry and withered.

Thus the firm and strong are the disciples of death,
The pliant and weak are the disciples of life.
For this reason armies that are strong will not be victorious;
Trees that are strong will break.
The strong and great dwell below,
The pliant and weak dwell above.

Under Heaven there is nothing more pliant and weak than water, but for attacking the firm and strong nothing surpasses it, nothing can be exchanged for it. The weak being victorious over the strong, the pliant being victorious over the firm—there isn't anyone under Heaven who does not know this. Yet no one is able to implement it.

These insights are clearly embraced by portions of the *Wei Liao-tzu:* "The army that would be victorious is like water. Now water is the softest and weakest of things, but whatever it collides with—such as hills and mounds—will be collapsed by it for no other reason than its nature is concentrated and its attack is totally committed." Thus formulated the concept is more complex than originally expressed in the *Tao Te Ching,* for it recognizes that it is not just "softness" that works the change, but rather the water's focus and endurance—its unremitting pressure over time—that cannot be withstood.

In general, the military writers perceived a need to employ each one of the four—the soft, hard, pliant, and firm—appropriately. The *Three Strategies* advises: "The *Military Pronouncements* states: 'The soft can control the hard, the weak can control the strong.' The soft is Virtue. The hard is a brigand. The weak is what the people will help, the strong is what resentment will attack. The soft has situations in which it is established; the hard has situations in which it is applied; the weak has situations in which it is employed; and the strong has situations in which it is augmented.

Combine these four and implement them appropriately.” Moreover, the four must be integrated and combined because perversely adopting a single one will doom the state: “The *Military Pronouncements* states: ‘If one can be soft and hard, his state will be increasingly glorious! If one can be weak and strong, his state will be increasingly glorious! If purely soft and purely weak, his state will inevitably decline. If purely hard and purely strong, his state will inevitably be destroyed.’ ” Even Sun-tzu, whose *Art of War* betrays Taoist influence but was written somewhat earlier, noted: “Realize the appropriate employment of the hard and soft through patterns of terrain.” Finally, Wu Ch’i, who was highly concerned about the problems of command and control, indicated the necessity for any qualified general to embrace such capabilities: “The employment of soldiers requires uniting both hardness and softness.”

23
The General's Righteousness

THE GENERAL MUST BE RIGHTEOUS. If he is not righteous then he will not be severe. If he is not severe then he will not be awesome. If he is not awesome then the troops will not die for him. Thus righteousness is the head of the army.

The general must be benevolent. If he is not benevolent then the army will not conquer. If the army does not conquer it will lack achievement. Thus benevolence is the belly of the army.

The general must have Virtue. If he lacks Virtue then he will not have any strength. If he lacks strength the advantages of the Three Armies will not be realized. Thus Virtue is the hands of the army.

The general cannot be without credibility. If he is not trusted then his orders will not be implemented. If his orders are not implemented, then the army will not be unified. If the army is not unified then it will not attain fame. Thus credibility is the feet of the army.

The general must know victory. If he does not know victory, the army will not be decisive. Thus decisiveness is the tail of the army.

COMMENTARY

This chapter and the succeeding ones concretely discuss the essential qualities characterizing effective commanders and detail commonly found faults and flaws that result in significant errors. Most of them also appear in the other early military writings because they all discuss the critical question of the commander's qualifications. Commentators and contemporary historians tend to focus upon the differences between Sun-tzu's and Sun Pin's five essential characteristics, stressing that Sun-tzu emphasized courage, Sun Pin righteousness and Virtue. However, a careful reading of each thinker's entire work will reveal that they essentially agreed, and that knowledge was considered foremost. This is to be expected since the battlefield environment invariably elicits certain qualities that, if absent, will result in obvious failures in command and control.

Many of the extant military books emphasize the necessity for personal leadership, admonishing the general to set an obvious example and visibly lead by sharing every hardship with his men rather than assuming a regal position to the rear in comfort and glory. However, by Sun Pin's era when campaign armies clearly began to exceed a hundred thousand soldiers, generals had long since abandoned any personal participation in the actual fighting. The late Spring and Autumn period had already seen the slow evolution of

professional commanders, while Wu Ch’i (who was active at the start of the Warring States period) was the last significant figure to combine both civil and martial abilities. Sun-tzu’s time obviously marked a turning point in the status and authority of “expert” generals who obviously sought (of necessity) to become visibly independent of the ruler once having been commissioned and assigned troops to command. Thus Sun-tzu emphasized the commander’s necessary independence, while the general’s character and virtues, including loyalty, became increasingly important to the political rulers of the day.

24
The General’s Virtue

IF HE REGARDS THE TROOPS LIKE AN INFANT, loves them like a handsome boy, respects them like a severe teacher, and employs them like clumps of earth, the general excels.

If despite adverse circumstances the battle is not lost, it is the general’s wisdom. If he does not slight the few nor suffer incursions from the enemy, if he is as cautious about the end as about the beginning, the general is perspicacious.

His orders not being interfered with and the ruler’s commands not entering the army’s gate, these are the general’s constants. When he enters the army the commanding general forgets his family and assumes sole authority.

In combat the two commanding generals will not both live, the two armies will not both survive. The general of the army’s fate hinges upon his troops.

The granting of additional rations and bestowing of irregular rewards, these are the commanding general's beneficence. When the bestowing of rewards does not extend past the day; the imposition of punishments is as quick as turning the face; and they are not affected by the man nor subject to external threats, this is the general of the army's Virtue.

COMMENTARY

This chapter is badly fragmented and the reconstruction is questionable because there are virtually no clues to strip sequence or justifications for even including them all. However, the content of each strip taken in isolation remains reasonably clear and can be contextually illuminated by similar passages in the other early military writings. The first passage focuses upon questions of discipline, understood as the overall treatment of troops and the means to bind them to the commander. Several measures, such as sharing hardship, have previously been discussed. The crux is balancing the soldiers' fear of the general's power and awesomeness with a devotion forged through ties of emotional allegiance, thereby precluding the danger of simple desertion. Sun-tzu's chapter entitled "Configurations of Terrain" contains a passage which may well underlie this one: "When the general regards his troops as young children, they will advance into the deepest valleys with him. When he regards the troops as his beloved children, they will be willing to die with him. If they are well treated but cannot be employed, if they are loved but cannot be commanded, or when in chaos they cannot be

governed, they may be compared to arrogant children and cannot be used." The final sentence in the fragment indicates the new, realistic attitude that pervaded Sun Pin's era: the troops, however much loved, are to be used like "clumps of earth." Any other approach, while temporarily saving lives, would result in greater losses and possibly the state's own demise.

Commentators generally cite a passage from the *Tao Te Ching* in conjunction with the second fragment: "In their management of affairs people constantly defeat them just as they are about to be completed. If one is as cautious about the end as the beginning, then there will not be any defeated states." The rise of the professional commander and the assertion of his necessary independence from the ruler are reflected in the third fragment. Sun-tzu said: "One whose general is capable and not interfered with by the ruler will be victorious." The *Three Strategies* and the *Six Secret Teachings* also emphasize these themes and would even have the general-designate, upon accepting his mandate, stress his necessary independence, by saying: "I have heard that a country cannot follow the commands of another state's government, while an army can not follow central government control. Someone of two minds cannot properly serve his ruler; someone in doubt cannot respond to the enemy."

Of course the Warring States trend away from civilian or political control starkly contrasts with present thinking and practices, at least as seen in the middle 1990s in the United States. (Naturally the communications revolution will radically affect the dimensions and possibilities of real-time battlefield control. Whenever new potentials appear for authorities to exercise power, inappropriately or not, they tend to be exploited. In contrast, in antiquity the fastest message or prearranged signaling system could require hours or days—far too slow to match the pace of battle.) Furthermore, there are two issues here: one is interference with the commander's exercise of authority by directing him

to implement externally generated orders. The second is undermining command authority by issuing orders to the army itself or allowing senior officers to insubordinately presume upon their relationship with the ruler.

Combat in Sun Pin's era increasingly developed into battles of annihilation, and actual clashes generally entailed the defeat of one side or the other and the subsequent death of the commander—whether on the battlefield or as punishment for losing. Of course Sun-tzu, Wu Ch'i, and many other strategists felt it necessary to warn against foolishly engaging an enemy force out of blind courage or the fear of being accused of cowardice.

Rewards and punishments were understood by all the military writers as providing the foundation for troop control. Generally the Legalists provide the most extensive analyses of their systematization and psychology, but the military theorists also embraced fundamental insights and psychological principles in common with them. Two of the most basic, already seen in earlier chapters, are that the implementation of rewards and punishments must be immediate, and that they should be effected without regard to rank or position. (In fact, many of them emphasized that punishments should be visibly imposed especially on the noble and powerful in order to cause the entire army to quake, to show that no one may presume upon position to escape punishment nor should fear being ignored because of low rank.) The *Ssu-ma Fa* is cited for its parallels with this chapter: "Rewards should not be delayed beyond the appropriate time for you want the people to quickly profit from doing good. When you punish someone do not change his position for you want the people to quickly see the harm of doing what is not good."

25
The General’s Defeats

AS FOR THE GENERAL'S DEFEATS (DEFECTS) :

First, he is incapable but believes himself to be capable.
Second, arrogance.
Third, greedy for position.
Fourth, greedy for wealth.
. . . . .
Sixth, light.
Seventh, obtuse.
Eighth, little courage.
Ninth, courageous but weak.
Tenth, little credibility.
. . . . .
Fourteenth, rarely decisive.
Fifteenth, slow.
Sixteenth, indolent.
Seventeenth, oppressive.
Eighteenth, brutal.
Nineteenth, selfish.
Twentieth, induces confusion.

When the defeats (defects) are numerous the losses will be many.

COMMENTARY

This concise chapter identifies twenty common, important defects in commanders. The chapter's title—"The General's Defeats"—has been translated to preserve the fundamental meaning of the character *pai* (defeat) and thereby cohere with both the military context and its appearance in the previous chapter, but in this usage *pai* is of course synonymous with "defects."

As already mentioned, most of the military writings identified character flaws that would adversely affect command and impact battles and campaigns. A few early books also offered criteria for evaluating officers, sometimes unique but generally falling within the general tradition of "knowing men," disqualifying those who were hasty, cowardly, greedy, stupid, and disloyal. A chapter in the *Six Secret Teachings* also explicates the reasons why certain combinations of defects may prove behaviorally inappropriate on the battlefield and open to exploitation by an astute enemy: "One who is courageous and treats death lightly can be destroyed by violence. One who is hasty and impatient can be destroyed by persistence. One who is greedy and loves profit can be bribed. One who is benevolent but unable to inflict suffering can be worn down. One who is wise but fearful can be distressed. One who is trustworthy and likes to trust others can be deceived. One who is scrupulous but incorruptible but does not love men can be insulted. One who is wise but indecisive can be suddenly attacked. One who is resolute and self-reliant can be confounded by events. One who is fearful and likes to entrust responsibility to others can be tricked."

Sun-tzu also identified several inappropriate traits and listed five excesses found in generals together with their specific dangers: "One committed to dying can be slain. One committed to living can be captured. One easily angered

and hasty can be insulted. One obsessed with being scrupulous and untainted can be shamed. One who loves the people can be troubled.” Among others, Wu Ch’i emphasized the importance of evaluating enemy commanders and then exploiting such recognizable defects as stupidity and greed while the *Three Strategies* includes a paragraph that concretely explicates Sun Pin’s conclusion that numerous defects will result in many losses: “If the general has a single one of these faults, the masses will not submit; if he is marked by two of them, the army will lack order; if by three of them, his subordinates will abandon him; if by four, the disaster will extend to the entire state.”

26 The General’s Losses

THE GENERAL’S LOSSES :

First, if he has lost the means for going and coming he can be defeated.

Second, if he gathers together turbulent people and immediately employs them; if he stops retreating troops and immediately engages in battle with them; or if he lacks resources but acts as if he has resources, then he can be defeated.

Third, if he constantly wrangles over right and wrong, and in planning affairs is argumentative and disputatious, he can be defeated.

Fourth, if his commands are not implemented, the masses not unified, he can be defeated.

Fifth, if his subordinates are not submissive and the masses not employable, he can be defeated.

Sixth, if the people regard the army with bitterness, he can be defeated.

Seventh, if the army is “old” he can be defeated.

Eighth, if the army is thinking about home he can be defeated.

Ninth, if the soldiers are deserting he can be defeated.

Tenth, if the soldiers are disordered he can be defeated.

Eleventh, if the army has been frightened several times he can be defeated.

Twelfth, if the soldiers’ route requires difficult marching and the masses suffer, he can be defeated.

Thirteenth, if the army is focusing upon ravines and strongpoints and the masses are fatigued, he can be defeated.

Fourteenth, if he engages in battle but is unprepared, he can be defeated.

Fifteenth, if the sun is setting and the road is far while the masses are dispirited, he can be defeated.

Sixteenth . . . . . he can be defeated.

Seventeenth, if the troops are restive and the masses afraid, he can be defeated.

Eighteenth, if commands are frequently changed and the masses are furtive, he can be defeated.

Nineteenth, if the army is disintegrating while the masses do not regard their generals and officials as capable, he can be defeated.

Twentieth, if they have been lucky several times and the masses are indolent, he can be defeated.

Twenty-first, if he has numerous doubts so the masses are doubtful, he can be defeated.

Twenty-second, if he hates to hear about his excesses he can be defeated.

Twenty-third, if he appoints the incapable he can be defeated.

Twenty-fourth, if their *ch'i* (spirit) has been injured from being long exposed on campaign he can be defeated.

Twenty-fifth, if their minds are divided at the appointed time for battle he can be defeated.

Twenty-sixth, if he relies upon the enemy becoming dispirited he can be defeated.

Twenty-seventh, if he focuses upon harming others and relies upon ambushes and deceit, he can be defeated.

Twenty-eighth, if the army's chariots lack organization, he can be defeated.

Twenty-ninth, if he deprecates the troops and the minds of the masses are hateful he can be defeated.

Thirtieth, if he is unable to successfully deploy his forces while the route out is constricted, he can be defeated.

Thirty-first, if in the army’s forward ranks are soldiers from the rear ranks and they are not coordinated and unified with the forward deployment he can be defeated.

Thirty-second, if in engaging in battle he is concerned about the front and the rear is therefore empty; or, concerned about the rear, the front is empty; or concerned about the left, the right is empty; or concerned about the right, the left is empty—his engaging in battle being filled with worry, he can be defeated.

COMMENTARY

This chapter appears to be an admixture of material from several sources rather than simply a series of observations from Sun Pin’s own school. While many of them are found scattered among the extensive lists embodied in other military writings, the most telling evidence is the use of three different Chinese characters for “army” in the original strips. However, “The General’s Losses” does preserve nearly thirty criteria for evaluating potential courses of action against an enemy, some attributable to command failures, others simply conditions of disorder or weakness. Moreover, as noted in previous chapters, astute commanders immediately take advantage of any exploitable opportunity, however fleeting. Many of those identified by Sun Pin are so fundamental, frequently resulting from profound failures in command and control, that they inevitably doom an enemy to defeat.

27 Male and Female Cities

IF A CITY LIES AMIDST SMALL MARSHES, lacks high mountains and notable valleys, but has moderate sized mounds about its four quarters, it is a “male city” and cannot be attacked.

If an army drinks from flowing water, it is water that will sustain life, and they cannot be attacked.

If before a city there is a notable valley while it has a high mountain behind it, it is a male city and cannot be attacked.

If the terrain within a city is high while it falls away outside it, it is a male city and cannot be attacked.

If within a city there are moderate sized mounds, it is a male city and can not be attacked.

An army that is encamping after being on the march without avoiding notable rivers, whose *ch’i* has been harmed and determination weakened, can be attacked.

A city with a notable valley behind it that lacks high mountains to its left and right is a vacuous city and can be attacked.

Thoroughly incinerated terrain is deadly ground; an army occupying it can be attacked.

If an army drinks stagnant water it is water that will result in death, and they can be attacked.

If a city lies amidst vast marshes and lacks notable valleys and moderate sized mounds, it is a “female city” and can be attacked.

If a city lies between high mountains and lacks notable valleys and moderate sized mounds, it is a female city and can be attacked.

If there is a high mountain in front of a city and a notable valley behind it, while before it the ground ascends and to the rear it descends, it is a female city and can be attacked.

COMMENTARY

This chapter is extensively cited—including by those who fail to translate it in their modern Chinese editions—as evidence that the scope and concepts of warfare significantly evolved over the century between Sun-tzu and Sun Pin. As is generally known, Sun-tzu had strongly cautioned against precipitously and wastefully attacking cities in a famous passage in “Planning Offensives.” For centuries thereafter his view was frequently but incorrectly simplified to merely “do not attack cities.” However, the passage’s initial section indicates that rather than simply condemning such attacks outright, he advocated the implementation of more effective tactics and reluctantly countenanced urban assaults only when unavoidable: “The highest realization of warfare is to attack the enemy’s plans; next is to attack their alliances; and the lowest is to attack their fortified cities. This tactic of attacking fortified cities is adopted only when unavoidable.”

Furthermore, tomb fragments recovered with Sun Pin’s *Military Methods* that appear to be an integral part of Sun-tzu’s *Art of War* expand his view further: “As for fortified cities that are not assaulted: We estimate that our strength is sufficient to seize it. If we seize it, it will not be of any advantage to the fore; if we gain it we will not be able to protect it to the rear. If our strength equals theirs, the city certainly will not be taken. If, when we gain the advantage of a forward position the city will then surrender by itself,

while if we do not gain such advantages the city will not cause harm to the rear—in such cases, even though the city can be assaulted, do not assault it.” Sun-tzu thus emphasized calculating the potential advantages and employing methods other than frontal assaults, such as drawing the enemy out so that they will be forced to fight on more advantageous and open terrain.

Sun Pin’s dual categorization of “male” and “female” cities is generally contrasted with Sun-tzu’s reluctance to assault fortified cities and interpreted as reflecting the growth of cities as economic and strategic centers. Unlike in the Spring and Autumn era when campaign armies could move relatively unhindered through sparsely populated open countryside, in the Warring States period they could be thwarted by the fortified strongholds that had concurrently assumed much greater military and economic value. Among these cities the strategically weaker ones, classified as female, could—and by implication—should be attacked, while the stronger or male ones, should be avoided. (However, note that Sun Pin never explicitly stated that the female cities should invariably be attacked or designated them as more than preferred targets.) His classificatory principles appear to be simply topographical; however, other situations similarly categorized for their attack potential have also been intermixed. The latter are similar to those raised in previous chapters, and to the tactical analyses found in other writings, including the *Wu-tzu.*

The*Wei Liao-tzu,* a military classic probably composed in the century following Sun Pin’s death, specifically discusses the importance of cities and notes the economic importance of their markets for sustaining the armed forces. The text further states that “land is the means for nourishing the populace; fortified cities the means for defending the land; combat the means for defending the cities.” Consequently, it identifies cities as primary targets, particularly if “the cities are large and the land narrow”: “Thus, in general, when the troops have assembled and the general has

arrived, the army should penetrate deeply into the enemy's territory, sever their roads, and occupy their large cities and large towns. Have the troops ascend the walls and press the enemy into endangered positions. Have the several units of men and women each press the enemy in accord with the configuration of the terrain and attack any strategic barriers. If you occupy the terrain around a city or town and sever the various roads about it, follow up by attacking the city itself." Thus a clear historical progression is witnessed from Sun-tzu through Sun Pin to Wei Liao-tzu, from viewing assaults on cities as the lowest tactical option to emphasizing the need to defend and attack them as the highest.

Sun Pin's principles for categorizing the cities in this chapter are less apparent. In antiquity it was axiomatic that one should "value high terrain and disdain low ground." Thus the T'ai Kung said: "Occupying high ground is the means by which to be alert and assume a defensive posture." Sun-tzu himself said, "Do not approach high mountains, do not confront those who have hills behind them." In addition, as a general principle he stated: "To cross mountains follow the valleys, search out tenable ground, and occupy the heights. If the enemy holds the heights, do not climb up to engage them in battle. This is the way to deploy an army in the mountains." Clearly, since it is decidedly disadvantageous to mount an uphill assault, to rush against an enemy directing its fire downward or taking advantage of gravity in wielding their shock weapons while benefiting from the attacker's rapid exhaustion brought about by the greater exertion necessary to ascend heights, it would be even more foolhardy to cross a deep valley and then attempt to storm the walls. Not only would the troops be tired, but the terrain would constrict the number that might be focused upon the walls, making it difficult to achieve the historically attested ratio of about four to one for the assault to prevail.

Whenever a city incorporates higher terrain (such as moderate sized mounds) that will allow missile weapons to be directed downward while forcing the attackers to direct their fire upward, the city should be considered strong, and therefore not easily approached and overwhelmed. Even if the walls are penetrated, the interior terrain will provide natural vantage points for mounting a collapsing defense.

Less clear is the relationship of mountains located to the sides of a city. Mountains to the rear would seem to prevent the employment of large numbers of men, just as marshes would, but at the same time—if undefended—allow an enemy the possibility of height advantage. Merely being able to employ incendiary arrows would endanger the city from above; this sort of tactical thought perhaps motivated Sun Pin to classify “a city lying between high mountains” as a female city. However, the mirrored relationship of the third and last classifications raises questions: “If before a city there is a notable valley while it has a high mountain behind it, it is a male city and cannot be attacked. . . . If there is a high mountain in front of a city and a notable valley behind it, while before it the ground ascends and to the rear it descends, it is a female city and can be attacked.”

In the second case, if all the defenses were directed toward the front—an incredible and therefore unthinkable blunder—an effective downward assault on their fixed arrays would be possible. However, front and rear, while reflecting the city’s orientation, simply represent a rotation in perspective for an attacker. A city with a high mountain behind it would seem to be equally easy prey for assault forces raining missiles downward, particularly if the defenders had not established preemptive defensive positions upon it. While Sun-tzu advised against having valleys, gorges, and similar depressions behind one’s forces, and stressed maneuvering the enemy so that he would find himself constricted by them to the rear, as a tactical principle it applies to field forces, not fixed citadels. Unfortunately, the reasoning here remains unclear, perhaps

awaiting the discovery of further texts on topography and configuration.

The presence of mounds appears to be the distinguishing factor in the first male city (situated amidst small mashes), for further below Sun Pin explicitly states that a city with moderate sized mounds is a male city. Accordingly, a city lacking them and other natural defenses, even though protected by marshes (which all the military writers warned would impede progress and enmire vehicles, as previously discussed) falls under the female classification.

The remaining situations, which may have been included by later compilers, overlaying a core discussion about “male and female cities,” indicate the importance of potable water to the army’s survival and suggest the problems posed by thoroughly savaged ground which is unable to sustain any life at all. Finally, there is one passage noting the plight of those exhausted from working their way along or across large rivers, who are exhausted and suffering from a loss of morale and determination, making them easy prey.

28
Five Criteria, Nine Seizings

五度九奪

OFTEN AN ARMY, finding itself under severe attack, will request the dispatch of rescue forces from far off, but when the rescuers arrive they are also severely defeated. Thus the essential principle for the army is that those fifty kilometers apart do not rescue each other. How much more so is this the case when the nearest are a hundred kilometers apart, the farthest several hundred kilometers. These are the extremes for weighing the army's possibilities. Thus the *Tactics* states: "If your provisions are unlike theirs, do not engage them in protracted battles. If your masses are unlike theirs, do not engage them in battle. If your weapons and component forces are unlike theirs, do not contend with them on confined terrain. If your organization is unlike theirs, do not contend with them across a broad front. If your training is unlike theirs, do not oppose them in their strength. When these five criteria are clear, the army will be able to forcefully advance unhindered.

As for the techniques for forcing the enemy to rush about: The first is called seizing provisions. The second is called seizing water. The third is called seizing fords. The fourth is called seizing roads. The fifth is called seizing ravines. The sixth is called seizing easy terrain. . . . . The ninth is called seizing what he solely values. In general

these nine “graspings” are the means by which to force the enemy to hasten about.

COMMENTARY

Only slightly more than one fourth of this chapter remains, with no indication of what the other topics beyond the two clearly expressed in these sections may have been. The beginning reflects an emphasis found in Sun-tzu’s first chapter, “Initial Estimations,” upon ana- lyzing the enemy and calculating the possibilities for victory and defeat. While the terms differ somewhat, the concept of “measuring” is found throughout Sun-tzu and most other military writers, particularly with regard to determining the number of men appropriate to configurations of terrain and campaigns.

The missing portion of Sun Pin’s initial discussion probably cited historical examples of forces being defeated after hasty but ill-conceived rescue efforts, leading to the conclusion that forces only fifty kilometers apart already exceed the possible range for mutual aid. Assuming that one force rushes to assist a separate, embattled unit (rather than both of them racing toward each other, thereby cutting their respective distances in half), the full fifty kilometers could require as long as two days based upon a normal marching speed of thirty kilometers per day. Therefore, depending upon the terrain’s characteristics, the battle site might theoretically be reached in a single day at double pace, just as at the battle of Ma-ling. However, the famous general Wu Ch’i stressed the need for a measured advance in order not to exhaust the men and horses, while among Sun Pin’s measures for wearing out an enemy is a forced double march: “Those who excel in warfare can cause the enemy to roll up his armor and race far off; to travel two days normal distance at a time; to be exhausted and sick

but unable to rest; to be hungry and thirsty but unable to eat. An enemy emaciated in this way certainly will not be victorious." Sun-tzu stated even more explicitly: "If you abandon your armor and heavy equipment to race forward day and night without encamping, covering two days normal distance at a time, marching forward a hundred kilometers to contend for gain, the Three Armies' generals will be captured. The strong will be first to arrive, while the exhausted will follow. With such tactics only one in ten will reach the battle site. If one contends for gain fifty kilometers away, it will cause the general of the Upper Army to stumble, and by following such tactics half the men will reach the objective. If you contend for gain at thirty kilometers, then two-thirds of their army will reach the objective."

The fundamental conclusion, expressed in concrete terms by the *Military Methods,* is simple: do not engage forces for which you are not a match. This embodies Sun-tzu's basic principle that one must first evaluate the enemy and then implement appropriate tactics, and Sun Pin's warning not to attack strength with weakness. Directly engaging a potent enemy would also dramatically contravene Sun-tzu's dictum "If it is not advantageous, do not move. If objectives can not be attained, do not employ the army." However, Sun Pin addressed the necessity for manipulating superior forces so that they might be successfully engaged in two chapters, "Distinction Between Guest and Host" and "Those Who Excel." Sun-tzu himself previously provided some basic parameters: "In general, the strategy for employing the military is this: If your strength is ten times theirs, surround them; if five, then attack them; if double, then divide your forces. If you are equal in strength to the enemy, you can engage him. If fewer, you can circumvent him. If outmatched, you can avoid him. Thus a small enemy that acts inflexibly will become the captives of a larger enemy."

The last part of this chapter discusses some concrete means for manipulating the enemy— literally forcing him to

hasten about—virtually identical to Sun-tzu's own measures. The thrust of these "seizures" is to compel the enemy to precipitously act by seizing what he values, what is essential to him, thereby taking the initiative and ensuring that any engagements will be with a weakened, confused, and tired opponent. In "Ten Questions" Sun Pin stated: "Attack positions that they must rescue." The list of critical targets, several previously identified in "Those Who Excel," encompasses such fundamentals as food, water, and strategic points. By striking and capturing them the army not only prevents the enemy from benefiting from them, but also compels them to mount defensive efforts centered on such resources simply to survive.

29
The Dense and Diffuse

THE DENSE CONQUER THE DIFFUSE; the full conquer the vacuous; byways conquer main roads; the urgent conquer the slow; the numerous conquer the few; the rested conquer the weary.

If they are dense, make them denser; if they are diffuse, disperse them; if they are full, make them fuller; if they are vacuous, make them more vacuous; if they are taking shortcuts, make them shorter; if they are on the road, make the road longer; if they are urgent, make them more urgent; if they are slow, make them slower; if they are numerous, make them more numerous; if they are few, make them fewer; if they are rested, make them more rested; if they are tired, make them more tired.

The dense and diffuse mutually change into each other; the full and vacuous mutually change into each other; the urgent and slow mutually change into each other; the numerous and few mutually change into each other; the rested and tired mutually change into each other.

Do not oppose the dense with the dense; do not oppose the dispersed with the dispersed; do not oppose the full with the full; do not oppose the vacuous with the vacuous; do not oppose the urgent with the urgent; do not oppose the slow with the slow; do not oppose the numerous with the numerous; do not oppose the few with the few; do not oppose the rested with the rested; do not oppose the weary with the weary.

The dense and diffuse mutually oppose each other; the full and vacuous mutually oppose each other; shortcuts and roads mutually oppose each other; the urgent and slow mutually oppose each other; the numerous and few mutually oppose each other; the rested and weary mutually oppose each other.

A dense enemy can be dispersed; the full can be made vacuous; one taking shortcuts can be forced onto main roads; the urgent can be slowed; the numerous can be made few; the rested can be fatigued.

COMMENTARY

Although the characters and phrases in this chapter are all simple and clear, the meaning remains somewhat enigmatic, turning upon how the referents are defined. Furthermore, because of the penchant for employing laconic parallels in series, it appears that some terms may have

been inappropriately included, such as byways (the direct?) and main roads (the indirect?). Depending upon perspective and inference, radically different interpretations are possible.

The entire chapter revolves around six correlated pairs, all of which are primarily found in Sun-tzu's *Art of War.* The first paragraph introduces them by positing conquest relationships between the first and second items: dense/diffuse; full/vacuous; byway/road; urgent/slow; numerous/few; and rested/tired. Except perhaps for the problematic "byway/road" pair, they were all obviously derived from empirical battlefield experience, becoming codified into fundamental, orthodox theory by Sun-tzu and others. Sun Pin's own sentences follow the basic pattern "density conquers dispersion," but the implication, as expressed in the translation, is simply their concrete embodiment, "the dense conquer the dispersed."

The second paragraph essentially expands a Taoist assumption into a concrete tactical principle— whatever an enemy's condition or situation, destabilize them by further increasing or augmenting it and then decisively apply military force in an appropriate manner to subjugate them. Chapter 36 of the traditional recension of the *Tao Te Ching* states:

If you want to reduce something, you must certainly stretch it.
If you want to weaken something, you must certainly strengthen it.
If you want to abolish something, you must certainly make it flourish.
If you want to grasp something, you must certainly give it away.
This is referred to as subtle enlightenment.
The pliant and weak will conquer the hard and strong.

This viewpoint is of course based upon the idea that extremes are unstable, that “reversal is the movement of the Tao.” The *Six Secret Teachings* adopted it as an operative principle in a chapter on psychological warfare entitled “Three Doubts”: “Now in order to attack the strong, you must nurture them to make them even stronger, and increase them to make them even more extensive. What is too strong will certainly break; what is too extended must have deficiencies. Attack the strong through his strength.” Wei Liao-tzu noted: “Observing the enemy in front, one should employ their strength. If the enemy is white, then whiten them; if they are red, then redden them,” while the *Ssu-ma Fa* warned against making solid formations heavier, no doubt because they would become unmanageable and inflexible. Accordingly, the formula would read as translated above: “If they are dense, make them denser.” In this particular case the objective might be achieved by forcing them into constricted areas where their density will render them unable to wield their weapons or implement any tactics. The only problematic term in this interpretation remains “byways/roads,” perhaps understandable as “force them onto even smaller paths.” Fortunately, despite the paragraphs that follow which speak about mutual change, in this chapter the conquest relationship is not stated as being symmetrical, even though the second term can be employed to overcome the first.

The third paragraph concretely elucidates the principle that a condition can change into its counterpart or complementary condition. The dense can of course be dispersed, the dispersed brought together to become dense. The weary can be rested, the rested wearied. Those taking the shortest or hastiest route can be forced onto indirect ones. This accords with Sun-tzu’s principle (applied in the chapter’s last paragraph): “In military combat what is most difficult is turning the circuitous into the straight, turning adversity into advantage. Thus if you make the enemy’s path circuitous and entice them with profit, although you set

out after them you will arrive before them. This results from knowing the tactics of the circuitous and the straight."

According to the next chapter entitled "The Unorthodox and Orthodox," complimentary conditions are in fact the basis of unorthodox tactics. The fundamental principle stated in the fourth paragraph—that identical attributes should not be used to oppose each other—is clearly asserted in one section of it: "Things that are the same are inadequate for conquering each other. Thus employ the different to create the unorthodox. Accordingly, take the quiet to be the unorthodox for movement; ease to be the unorthodox for weariness; satiety to be the unorthodox for hunger; order to be the unorthodox for chaos; and the numerous to be the unorthodox for the few." Furthermore, the fourth paragraph reflects Sun-tzu's and Sun Pin's basic philosophy of not opposing strength with strength because opposing the dense with the dense becomes a question of head-butting and attrition, a test of force and a waste of power rather than an effective tactic. Consistent with this tactical principle, in "The Questions of King Wei" and "Ten Deployments" Sun Pin outlined several formations and correlated a few of them with the deployments against which they would prove effective. While they are not invariably complementary conditions, they certainly never describe tactics that entail direct confrontations of strength.

The final portion concludes the chapter with statements of the form "if the enemy is X, then can X-complement." "If the enemy is dense, then one can be dispersed" would be the simplest and most direct understanding. However, the translated reading of "if the enemy is dense, then he can be made sparse" is coherent with Sun Pin's approach to manipulating the enemy and thereby creating an advantage that can be exploited by troops in a particular condition. Obviously the initial situation defines the domain of possibilities: if one has fewer troops than the enemy, they cannot simply be multiplied. Instead, tactics must be employed to create localized, realizable advantages. Even

when both sides are numerous and dense, orthodox frontal assaults are to be avoided. Rather, if a dense formation is to be employed, then the enemy should be forced to disperse somewhat, allowing deep penetration and quickly overwhelming their troops in detail. Tricks and ruses should be employed to compel them into movement, to divide and fragment them. Conversely, another unorthodox response would be to employ a diffuse formation to control and assault them. In implementing such tactics the wisdom of the second paragraph becomes apparent: when employing a diffuse formation against a dense enemy, the more concentrated they may be, the more effective the diffuse methodology. Spread-out formations are employed to attack circular and square formations in Chapter 17, “Ten Questions,” while other concrete analyses sustaining this argument are found scattered throughout the book. For example, Chapter 16 speaks about the diffuse providing a flexible response capability, whereas Chapter 14 suggests using the heavy to attack the light, a perfect example of employing the complementary and thus unorthodox.

30
Unorthodox and Orthodox

THE PATTERNS OF HEAVEN AND EARTH, reaching an extreme and then reversing, becoming full and then being overturned, these are *yin* and *yang.*

In turn flourishing, in turn declining, these are the four seasons.

Having those they conquer, having those they do not conquer, these are the five phases.

Living and dying, these are the myriad things.

Being capable, being incapable, these are the myriad living things.

Having that which is surplus, having that which is insufficient, these are form and strategic power.

Thus as for the disciples of form, there are none that cannot be named. As for the disciples that are named, there are none that cannot be conquered. Thus the Sage conquers the myriad things with the myriad things; therefore his conquering is not impoverished.

In warfare, those with form conquer each other. There are not any forms which cannot be conquered, but none know the form by which one conquers. The changes in the forms of conquest are coterminal with Heaven and Earth and are inexhaustible.

As for the forms of conquest, even the bamboo strips of the Ch’u and Yüeh would be insufficient for writing them

down. Those that have form all conquer in accord with their mode of victory. Employing one form of conquest to conquer the myriad forms is not possible. That by which one controls the form is singular; that by which one conquers cannot be single.

Thus when those who excel at warfare discern an enemy's strength, they know where he has a shortcoming. When they discern an enemy's insufficiency, they know where he has a surplus. They perceive victory as easily as seeing the sun and moon. Their measures for victory are like using water to conquer fire.

When form is employed to respond to form, it is orthodox. When the formless controls the formed, it is unorthodox. That the unorthodox and orthodox are inexhaustible is due to differentiation. Differentiate according to unorthodox techniques, exercise control through the five phases, engage in combat with three forces. Once differentiations have been determined things take form. Once forms have been determined they have names.

Things that are the same are inadequate for conquering each other. Thus employ the different to create the unorthodox. Accordingly, take the quiet to be the unorthodox for movement; ease to be the unorthodox for weariness; satiety to be the unorthodox for hunger; order to be the unorthodox for chaos; and the numerous to be the unorthodox for the few.

When action is initiated it becomes the orthodox; what has not yet been initiated is the unorthodox. When the unorthodox is initiated and is not responded to, then it will be victorious. One who has a surplus of the unorthodox will attain surpassing victories.

Thus if when one joint hurts the hundred joints are not used, it is because they are the same body. If, when the front is defeated the rear is not employed, it is because they are the same form.

Thus to realize strategic power in warfare, large formations should not be severed, small formations should not be broken up. The rear should not encroach upon the front, the front should not trample the rear. Those who are advancing should have a route out, those withdrawing should have a route for advancing.

If rewards have not yet been implemented and punishments not yet employed, but the people obey their commands, it is because the people are able to implement them. If rewards are high and punishments pervasive but the people do not obey their commands, it is because the people are not able to implement the commands. In spite of disadvantageous circumstances, to make people advance unto death without turning on their heels is something that even Meng Pen would find difficult; to require it of the people is like trying to make water flow contrary to normal.

Thus to realize strategic combat power, increase the victorious; alter the defeated; rest the weary; feed the hungry. Accordingly the people will see the enemy's men but not yet perceive death; they will tread on naked blades and not turn their heels. Thus when one understands patterns of flowing water, he can float rocks and break boats. When, in employing the people, one realizes their nature, then his commands will be implemented just like flowing water.

COMMENTARY

Sun Pin's final original chapter is without doubt the paradigm expression and philosophical culmination of the strategy of the unorthodox and orthodox. Among the *Seven Military Classics,* only Sun-tzu's *Art of War* and the T'ang dynasty *Questions and Replies* explicitly adopt these methods, although the *Six Secret Teachings* does advocate

many tactics fundamental to actualizing the concepts. Sun-tzu himself might well be considered the concept's progenitor, at least insofar as extant materials allow attribution, and certainly its first proponent. However, in this chapter Sun Pin not only embraces the basic concepts, but elucidates and expands them, further systematizing and advancing them by integrating them with Suntzu's concepts of the formless and the *Tao Te Ching*'s cosmogenic philosophy. While much of the material derives from Sun-tzu's *Art of War,* including some of the explanatory analogies, Sun Pin's comprehensive formulation transcends the original and the chapter remains the most incisive discussion to be found among any of China's many military writings.

Although the entire *Art of War* is premised upon and largely reflects the implementation of the unorthodox and orthodox, Sun-tzu primarily advanced the concept in the chapter entitled "Strategic Military Power." Clearly Sun Pin incorporated Sun-tzu's imagery as well, for the cyclic character of natural phenomena underlies the concept of the ever-evolving, ever-changing tactics of the unorthodox and orthodox. The conception's essence is that engaging an enemy in battle in conventional, expected ways represents "orthodox" tactics, while employing unexpected, surprise attacks and movements is unorthodox. Naturally everything depends upon the enemy's assumptions and evaluations in a particular situation: if they expect a flanking attack instead of the usual frontal advance in strength, the former then turns out to be "expected" and therefore, by definition, "orthodox" rather than "unorthodox" as initially conceived. The question is thus reduced to a tactical ones: how to create false expectations and exploit them. For the former the military writings are replete with techniques for confusing and befuddling the enemy; realizing the latter depends upon misdirection and the army's ability to maneuver, segment and recombine, and effect unexpected

speed such as through the employment of the cavalry arm appearing just about Sun Pin's era.

The second concept echoed in Sun Pin's formulation of the unorthodox and orthodox probably stems from the *Tao Te Ching* but also appears in other writings of the period, including (to a more limited extent) the *Art of War.* The famous opening lines of the *Tao Te Ching* state:

The Tao that can be spoken of is not the constant Tao;
The name that can be named is not a constant name.
The nameless is the beginning of Heaven and Earth;
The named is the mother of the myriad things.

Embracing the terminology, if not necessarily the full philosophy of the *Tao Te Ching,* Sun Pin integrates Sun-tzu's concept of the formless and the Taoist perspective on names: "Thus as for the disciples of form, there are none that cannot be named. As for the disciples that are named, there are none that cannot be conquered." The key is the nature of the visible, of that which has attained form. Once something is visibly formed, it can be described; once describable, characteristics can be appended, predications can be made, and plans can be formulated. In the realm of concrete things—which, for Sun Pin and the other military strategists, included military deployments or dispositions—any tangible form can be opposed and conquered by another. The normal penchant in the west, perhaps stemming from the Greek tradition, has been to oppose force with force, strength with strength. In contrast, Sun Pin here and in previous chapters advises against this wasteful, often futile approach, instead advocating consciously determining and employing the complementary position, the unorthodox. Examples of complementary dispositions found in the immediately preceding chapters (such as "quiet"/"movement") are reiterated here, although now explicitly identified as unorthodox counterparts. The principle of employing the unorthodox should govern the

tactics to be implemented to achieve victory and is the “singular” principle referred to by the sentence, “That by which one controls the form is singular; that by which one conquers cannot be single.” Therefore, it is only necessary to develop the tactics appropriate to any particular battle, to find the “thing”—that is, the form or disposition—among the myriad things whose strength will naturally counter and overwhelm the enemy.

In the “Unorthodox and Orthodox” Sun Pin equally adheres to Sun-tzu’s concept of the formless, both of them having absorbed the Taoist idea that the formless cannot be named, cannot be characterized. In “Vacuity and Substance” Sun-tzu himself stressed being formless—accomplished through deception, numerous misleading techniques, and stealthy maneuvers—in order to prevent the enemy from discerning one’s intentions and disposition, thereby thwarting the development of effective tactics for attack and defense. But Sun Pin, while obviously embracing his doctrine, explicitly makes it more comprehensive through the arguments developed in the several middle paragraphs, concluding that “when the unorthodox is initiated and is not responded to, then it will be victorious. One who has a surplus of the unorthodox will attain surpassing victories.” Of course this primarily applies to situations in which strengths are equal or one is outmatched, rather than those in which the enemy is outnumbered by a significant factor and more “orthodox” tactics, such as convergent attacks, described in the other chapters can be employed.

The final few paragraphs venture into the area of motivation and the means for realizing strategic power. He insightfully focuses upon the need for organization and discipline in formations; otherwise any deployment will be fraught with the possibility of internally generated chaos. However, if the troops are treated well and not compelled to undertake the impossible, a formidable force can be forged. Unexpressed, but no doubt underlying Sun Pin’s thought, is

Sun-tzu’s concept of strategic power and its effects in coercing men to perform as expected, ensuring that the army will prevail because the requisite conditions for executing tactics—an imbalance in power—are attained.

31
Five Instructions

SUN-TZU SAID:

“One who excels at instructing the fundamentals does not make changes when directing the army in combat. Thus it is said that there are five instructions: instructions for controlling the state; instructions for arraying the lines; instructions for controlling the army; instructions for controlling deployments; and instructions for making combat advantageous when the armies are hidden and not mutually visible.

“What are the instructions for controlling the state? As for the five virtues of filiality, brotherliness, and goodness, do the warriors lack any one of them? Then even though they can shoot a bow they should not mount a chariot. This being so then those who excel at archery act as the left of the chariot, those who excel at driving act as drivers, and those who lack both skills act as the right. Thus three men are emplaced on a chariot; five men are emplaced in the squad of five; ten men make a line; a hundred men make a company; a thousand men have a drum; ten thousand men act as a martial force and the masses can be employed in great ways. The instructions for controlling the state are such.

“What are the instructions for arraying the lines like? The general’s men must take responsibility even for broken down chariots and exhausted horses, for they provide the

means to efficiently advance. If the general establishes himself at ravines and strong points, they will provide the means to be respected and ensure force will be adequate. The instructions for arraying the lines are such.

"What are the instructions for controlling the army like? The soldiers' leather armor and the wagons' metal layers are the implements that make it possible to deploy against the enemy . . . . . Rewards and honors are the means to make those who excel glorious. Then the deployment will always be advantageous and the formations will be substantial and abundant. The instructions for controlling the army are such.

"What are the instructions like for making combat advantageous when the forces are hidden and not mutually visible? . . . . ."

COMMENTARY

This chapter appeared only with the 1985 revised reconstruction of the text, increasing the portions directly attributed to Sun Pin (due to the appearance of his name at the outset of the chapter) in the core material to sixteen chapters. Although the chapter is badly damaged, the basic theme—five instructions designed to ensure the foundations of military arts are well practiced and understood—remains clear. The overriding principle is that the commander and his troops should be at one, fully knowledgeable about each other, just as in the analogy of the mind and the four limbs. Thus, as Wu Ch'i and others point out, instruction in the basics should be strict; thereafter orders should not be changed. This allows a rational, deliberate approach to combat engagements that ensures the troops are capable of efficiently executing a chosen battle plan rather than floundering about in a flawed, disordered attempt to

translate extemporaneous, even helter-skelter improvisations into survival tactics.

The principles behind the instructions' division and the exact contents of each category remain somewhat puzzling, partly as a result of the serious losses incurred over the centuries. However, the first topic, instructions for controlling the state, focuses not on government or administrative measures, but instead emphasizes the need for ethical values, for the soldiers to be marked by characteristics that will make them reliable and exemplary. This is perhaps unique, for most of the military writings speak about virtue being essential for rulers, generals, and even the lower officers, but not for ordinary soldiers who were normally trained to immediate response and obedience, not the cultivation of virtue. Of course the paragraph may not be speaking about the masses of ordinary troops, but perhaps just the selected few, the elite warriors, or even the officers. Whatever the scope, the import is clear and merits noting.

This first paragraph also reflects the assignment of duties in chariot warfare as practiced from the Shang on downward: three men, with the archer (who was also the commander) on the left, the driver in the middle, and the shock weapons specialist on the right to wield the halberd. The decade system of organization is also prominent, based on the squad of five but extending through companies of a hundred and armies of ten thousand rather than the common pyramided sequence of five—twenty-five—one hundred twenty-five up to armies of 12,500. The decade based system is thought to have characterized the peripheral states in contrast to the earlier Chou and the central plains states influenced by them, and will be discussed in our other works.

The instructions for arraying and deploying the lines are unfortunately fragmented, but once again the importance of occupying ravines and exploiting strong points, as discussed in other chapters, is apparent. The need to conserve war

materials, such as chariots and horses, reflects the Sun family emphasis upon the economics of warfare, and also a new approach (at least in the extant written materials) to the practice of materials management, to ensuring adequate logistical means when required.

The third paragraph apparently would stress the virtues of armor in providing the enemy with a sense of security, in guaranteeing they would be willing to risk danger and fight. As Wu Ch'i said in "Controlling the Army": "If the weapons are sharp and the armor sturdy the men will easily engage in battle." Presumably Sun Pin constructs a bridge of effects in the missing portion, leading from the armor's sturdiness to the men manifesting an overwhelming confidence in their deployments, thereby realizing the army's strategic potential in combat.

The last two topics have been irretrievably lost. Of the two, the method for controlling an army when the enemy is not yet visible—in contrast to an enemy seen, but whose capabilities and tactics, while not yet apparent, can be probed and otherwise subjected to analysis and evaluation—but known to be positioned at some discrete distance would be of great interest because it is not otherwise addressed in the *Military Methods* or the other military writings.

32
Employing Cavalry

(Supplement from the T’ung Tien)

SUN-TZU SAID:

Su “In employing the army there are ten tactical objectives for which the cavalry is advantageous:

“First, when moving to counter an enemy, to arrive first.

“Second, to exploit vacuities at the enemy’s back.

“Third, to pursue the scattered and strike the chaotic.

“Fourth, when moving to counter an enemy, to strike their rear, forcing them to run off.

“Fifth, to intercept provisions and foodstuffs, to sever the army’s roads.

“Sixth, to defeat forces at fords and passes, to open large and small bridges.

“Seventh, to surprise unprepared troops, to strike as yet unorganized brigades.

“Eighth, to attack lassitude and indolence, to go forth where not expected.

“Ninth, to incinerate accumulated stores and empty out market lanes.

“Tenth, to forage in the fields and countryside, to bind up their children.

“For these ten tactical objectives it is advantageous to employ the cavalry in warfare. Now the cavalry is able to

separate and combine, able to disperse and assemble. A hundred kilometers comprise a marching period; for a thousand kilometers they travel forth, their going and coming unbroken. Thus they are termed ‘the weapon of separating and combining.’ ”

COMMENTARY

This highly coherent passage, preserved in the *T’ung Tien,* explicitly discusses the circumstances in which it would be advantageous to exploit the swiftness and flexibility of the cavalry to attain tactical objectives. For centuries it was believed that this was the only surviving passage from Sun Pin’s work and taken as evidence of the latter’s existence by those who continued to believe both Sun-tzu and Sun Pin penned original military works rather than Sun Pin perhaps having just edited the former’s effort.

The chapter’s subject matter coheres with that preserved in the *Art of War* and Sun Pin’s *Military Methods,* lending credence to its attribution to the Sun family. Moreover, it parallels a chapter entitled “Cavalry in Battle” found in the *Six Secret Teachings* reprising the conditions under which the cavalry might best be employed.

The real question is of course whether the cavalry had already become an operational arm in Sun Pin’s era, contrary to scholarly opinion (at least in the West) to date. The inclusion of certain statements in the *Military Methods* itself, unless inserted or amended by later editors, strongly suggests this possibility, as does the *T’ung Tien* remnant. However, the province and transmission of the latter is untraceable, and while highly congruent with Sun Pin’s writings, may simply be a later formulation attributed to him solely to lend an air of authenticity, particularly as his work had disappeared from the imperial libraries. (This does not

completely preclude its continued existence in secret libraries or families with military traditions, but indicates it was no longer to be found in even limited circulation.)

33
Attacking the Heart

(A *T’ai-p’ing Yü-lan* Fragment)

SUN PIN OF CH’I addressed the king of Ch’i saying: “Now in the Tao for attacking other states assaulting their hearts is uppermost. Concentrate upon first causing their hearts to submit. Now what Ch’in relies upon as its heart is Yen and Chao. They are about to gather in Yen and Chao’s authority. So if today you exercise your persuasion upon the rulers of Yen and Chao, do not use vacuous words and empty phrases. You must turn their hearts with the prospect of substantial profits. This is what is referred to as attacking the heart.”

COMMENTARY

This succinct discussion preserved in the *T’ai-p’ing Yü-lan* evinces a wordplay more characteristic of late Warring States period writings than Sun Pin’s own era and may even have been composed many centuries after his death. However, it helped to preserve his image as a historical figure and would seem to belong to the Chinese discursive

genre. The paragraph simply turns upon the dual meaning of the character *hsin,* “heart” and “mind.” Obviously when physical location is intended, “heart” is immediately understood. However, beyond this circumscribed case, neither meaning ever completely excludes the other, just as when Sun Pin speaks about “assaulting their hearts” and “causing their hearts (minds) to submit.”

Index of Strategic Concepts and Tactical Principles

This index covers only the strategic concepts and tactical principles embodied in the original texts of the *Art of War* and the *Military Methods*, not the general introduction or translator's commentary. References are to individual chapter numbers within each book; "AW" indicates the *Art of War* and "MM" the *Military Methods*. Throughout, the emphasis has been upon identifying significant tactical principles, fundamental military concepts, and illuminating passages rather than full comprehensiveness. In using the index, reference should also be made to related concepts. While some tactical principles have been explicitly noted, in most cases there are varying possibilities for any particular situation—such as being outnumbered— and therefore only a general category has been indicated. Fundamental concepts, such as "configurations of terrain," invariably entail numerous tactical possibilities, and are therefore classified under "concepts" rather than the associated principles.

ESSENTIAL MILITARY CONCEPTS, THEORIES, AND PRACTICES

Army: **MM**

Attack and Defense Attack: **AW**; **MM**
Defense: **AW**; **MM**
Command and Control Evaluate and select men: **AW**; **MM**
Fundamentals: **AW MM**
Generals Credibility: **MM**
Flaws: **AW**; **MM**
Independence: **AW**; **MM**
Knowledge: **AW**; **MM**
Qualifications: **AW**; **MM**
Virtue: **MM**
Implements of control Drums: **AW**; **MM**
Flags and pennants: **AW**; **MM**
Gongs: **AW**; **MM**
Military discipline: **AW**; **MM**
Military organization: **AW**; **MM**
Motivating men: **AW**; **MM**
Rewards and Punishments: **AW**; **MM**
Component forces Cavalry: **AW**; **MM**
Chariots: **AW**; **MM**
Elite: **AW**; **MM**
Employ appropriately: **MM** Infantry: **MM**
Defensive measures Caltrops: **MM**
Ditches: **MM**
Fortifications (walls, ramparts): **AW**; MM
Moats: **AW**; **MM**
Doubt: **AW**; **MM**
Evaluate the enemy: **AW**; **MM**
Estimate (calculate) chances: **AW**; **MM**
Engage in warfare only if victory is possible: **AW**; **MM**
Avoid strong enemy forces: **AW**; MM
Gather military intelligence: **AW**; MM
Determine the terrain: **AW**; **MM**
Employ spies: **AW**; **MM**
Formations, fundamental concepts: **MM**
Logistics: **AW**; **MM**
Night battles: **AW**; **MM**

Omens: **AW**; **MM**
Orthodox and Unorthodox
Orthodox: **AW**; **MM**
Unorthodox: **AW**; **MM**
Psychology of *ch'i* (spirit) in warfare: **AW**; **MM**
Strategic power: **AW**; **MM**
Imbalance of, exploit: **AW**; **MM**
Unity: **AW**; **MM**
Vacuity and Substance: **AW**
Vacuity: **AW**
Warfare, Tao of: **AW**; **MM**
Weapons groups: **AW**; **MM**
Welfare of the people (essential): **AW**; **MM**
Wen and Wu (Civil and Martial): **AW**

ESSENTIAL TACTICAL PRINCIPLES

Alliances, form or attack: **AW**
Ambushes, employ: **AW**; **MM**
Attack the enemy's plans: **AW**
Attack when and where unexpected: **AW**; **MM**
Campaigns, prolonged, and numerous battles‡avoid: **AW**; **MM**
Confuse, disrupt, disorder the enemy: **MM**
Concentrate force: **AW**; **MM**
Constraint and measure (be controlled): **AW**; **MM**
Deceptive, be: **AW**; **MM**
Decisive, be: **AW**; **MM**
Defensive posture, assume a fortified: **AW**; **MM**
Destabilize the enemy into motion: **AW**; **MM**
Divide the enemy's forces: **AW**; **MM**
Envelop the enemy: **MM**
Flexible, be: **MM**
Formations, specific Aquatic: **MM**
Awl: **MM**

- Basket: **MM**
- Circular: **AW**; **MM**
- Closed: **MM**
- Cloud Array: **MM**
- Concentrated: **MM**
- Dark Rising: **MM**
- Dense: **MM**
- Diffuse: **MM**
- Eight: **MM**
- Elongated: **MM**
- Endangered: **MM**
- Entangled: **MM**
- Extended Horizontal: **MM**
- Fierce Wind: **MM**
- Floating Marsh: **MM**
- Hooked: **MM**
- Incendiary: **MM**
- Piercing: **MM**
- Sharp: **MM**
- Solid: **MM**
- Square: **MM**
- Strong front: **MM**
- Whirlwind: **MM**
- Wild Geese: **MM**

Formless, be: **AW**; **MM**
Initiative, seize the: **MM**
Manipulate (compel) the enemy: **AW**; **MM**
By changing strength to weakness: **AW**; **MM**
By confusing them: **MM**
By deceiving them: **AW**; **MM**
By disordering them: **AW**; **MM**
By enticing them with apparent profit: **AW**; **MM**
By feigning defeat and chaotic retreat: **MM**
By harassing and psychologically weakening them: **MM**
By keeping them ignorant: **AW**; **MM**
By playing upon their character and emotions: **AW**; **MM**
By provoking them into action: **AW**

By seizing or threatening what they value or require: **AW**; **MM**
By threatening them: **AW**
By thwarting them: **AW**; **MM**
By tiring and debilitating them: **AW**; **MM**
Misperception and disorder, employ methods to cause
Create clamor and noise: **MM**
Multiply flags and fires: **MM**
Plan and prepare thoroughly: **AW**; **MM**
Press the enemy, exploit victory: **AW**; **MM**
Sanitary conditions, maintain: **AW**; **MM**
Secure essential supplies, sustain supply lines: **AW**; **MM**
Forage and plunder: **AW**; **MM**
Security, mount and ensure: **MM**
Segment your forces and reunite: **AW**; MM
Establish a reserve force: **MM**
Sever enemy supply lines: **AW**
Surprise, employ: **MM**
Sustain the effort: **MM**
Swift and explosive, be: **AW**; **MM**
Terrain, concept of: **AW**; **MM**
Avoid disadvantageous terrain: **MM**
Exploit: **AW**; **MM**
Timely, be: **MM**
Unexpected, be: **AW**; **MM**
Vary tactics: **AW**; **MM**
Weakness in the enemy, exploit by attacking
Command deficiencies: **AW**; **MM**
The confined: **MM**
The confused: **AW**; **MM**
The disordered: **AW**; **MM**
The dispirited: **MM**
The disunited: **MM**
The doubtful: **AW**; **MM**
Expectations: **MM**
The fearful and terrified: **MM**
Those fording rivers: **MM**

The hungry: **AW**
The ignorant: **MM**
The lax and negligent: **AW**; **MM**
The slow: **MM**
The tired and debilitated: **AW**; **MM**
The unprepared: **AW**; **MM**
The vulnerable and exposed: **MM**
Voids (vacuities): **AW**; **MM**
The weak: **MM**
Wind, weather, and natural conditions, exploit: **AW**; **MM**

COMMONLY ENCOUNTERED SITUATIONS WITH SELECTED TACTICS

Offensive Measures

Attacks Aquatic: **AW**; **MM**
Counter: **MM**
Incendiary: **AW**; **MM**
Surprise: **MM**
Attacks, objectives Cities (including sieges): **AW**; **MM**
The confined: **MM**
The dispersed: **MM**
Elite forces: **MM**
Flanks: **MM**
Fording troops: **MM**
Formations. *See specific formations*
Fortifications: **MM**
The heavy: **MM**
The soft: **MM**
The solid: **MM**
Strong, well-ordered: **MM**
Supply lines: **MM**
The surrounded: **MM**

- Configurations of terrain: concepts and associated tactics
  - Accessible: **AW**
  - Confined: **AW**
  - Constricted: **AW**; **MM**
  - Contentious: **AW**; **MM**
  - Deadly: **AW**
  - Defiles: **AW**
  - Difficult: **AW**
  - Disadvantageous: **MM**
  - Dispersive: **AW**
  - Distant: **AW**
  - Easy: **AW**; **MM**
  - Encircled: **AW**
  - Entrapping: **AW**
  - Expansive: **AW**
  - Fatal: **AW**; **MM**
  - Focal: **AW**
  - Forests: **AW**; **MM**
  - Heavy: **AW**
  - Heights: **AW**; **MM**
  - Isolated: **AW**
  - Light: **AW**
  - Mountains: **AW**; **MM**
  - Near: **AW**
  - Precipitous: **AW**
  - Ravines and narrows: **AW**; MM
  - Rivers and lakes: **AW**; **MM**
  - Stalemated: **AW**
  - Suspended: **AW**
  - Tenable: **AW**; **MM**
  - Traversable: **AW**
  - Valleys: **AW**
  - Vegetation, heavy: **AW**; **MM**
  - Wetlands: **AW**; **MM**
- Invading and occupying enemy territory ("guest"): **AW**; **MM**
- Mobilizing the army: **MM**

Probing the enemy: **MM**
Pursuing a retreating enemy: **AW**; **MM**
Relative strength Equal: **AW**; **MM**
  Stronger than the enemy: **AW**; **MM**
  Weaker than the enemy: **AW**; **MM**
Retreats: **AW**; **MM**
Standoff: **MM**

Defensive Measures

Against aquatic attacks: **MM**
Against ambushes: **AW**
For constricted terrain: **MM**
For fatal terrain: **MM**
Against engaging the enemy: **MM**
Against flank attacks: **MM**
Against incendiary attacks: **MM**
Against infantry: **MM**
Against invaders and raiders: **AW**; **MM**
Intense conflict: **MM**
For rescuing your own forces: **MM**
For retreats: **AW**; **MM**
Against sieges: **AW**; **MM**
Against superior enemies: **MM**
Against being surrounded: **AW**
Weapons groups: **MM**